Monthly Energy Review

December 1974

Federal Energy
Administration

National Energy
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Contents

Part 1 Overview

With the start of the winter heating season, domestic production of energy in October increased a substantial 6.5 percent above the September level. This increase was more than twice the 3.1 percent production gain between these 2 months in 1972 but only slightly larger than last year's increase. Cumulative production for the first 10 months of 1974 continued to be below that for the same period last year by about 0.5 percent. It was almost 1 percent below that for the first 10 months of 1972.

Since 1972, there have been noteworthy changes in the proportions that the various energy sources contribute to total domestic production. Petroleum's contribution has declined about 1 percentage point per year, from 30.6 percent during the period January through October 1972 to 28.8 percent for the current year. A corresponding rise has occurred in the portion of production represented by coal, from 23.1 percent in 1972 to 24.5 percent. Natural gas remained the largest contributor to total U.S. energy output, supplying 36.1 percent of this year's total. However, this represents a decrease of about 1 percentage point from its contribution during 1972 and 1973. The most significant change has occurred in nuclear energy production which has doubled since 1972, increasing its share of total output from 0.9 percent in 1972 to 1.7 percent so far this year.

The November 12 strike by the estimated 120,000 members of the United Mine Workers of America, who produce about 70 percent of the Nation's coal, is expected to cause a reduction in projected coal output for the entire year of about 30 million tons. Through the end of October, production of bituminous coal and lignite was running about 6 percent above the level for the same period last year. Despite the output lost due to the strike, total output for the year could still be 10 to 15 million tons higher than the total for 1973. Economically, the impact of the strike is being keenly felt by coal-dependent industrial sectors, especially the steel and railroad industries, where layoffs during November totaled approximately 25,000 workers.

Domestic demand for refined petroleum products during October was at its highest level for any month this year, surpassing September by 6.8 percent. Demand was 3.3 percent higher than in October 1973, making the month the first one of the year to show a higher demand level than the corresponding month in 1973. Demand for distillate fuel oil, which accounted for 16 percent of the total, showed the largest increase, up 14.1 percent from September. This compares with increases of 25 percent and 10 percent experienced for the corresponding months in 1972 and 1973, respectively. For the year-to-date, total refined product demand averaged 3.6 percent less than that for the comparable period last year. On the other hand, domestic coal consumption for the first 9 months of this year was up about 1 percent. The higher consumption level is attributed to increased use of coal at electric utility plants which account for about 70 percent of total domestic coal consumption.

Following a modest decline of 6 percent in September, October imports of fossil fuels were up almost 16 percent. However, for the first 10 months of 1974, imports were about 4 percent less than the level experienced for those months a year ago. Contributing to this decline was a decrease of 12.6 percent in imports of refined products which accounted for 39.2 percent of the total mix of fossil fuel imports. Natural gas imports, comprising 7.6 percent of the total, also declined, down 5.6 percent. Crude oil imports, furnishing the remaining 53.2 percent, showed the only increase during this period, up almost 4 percent from last year. Moreover, total imports of fossil fuels have declined relative to total domestic energy production, from 21.5 percent during the first 10 months of 1973 to 20.7 percent so far this year.

Inventories of crude oil and most of the major refined products continued to climb in October due to increased production and imports during the month. Motor gasoline and residual fuel oil were the only exceptions, both registering rather minor declines.

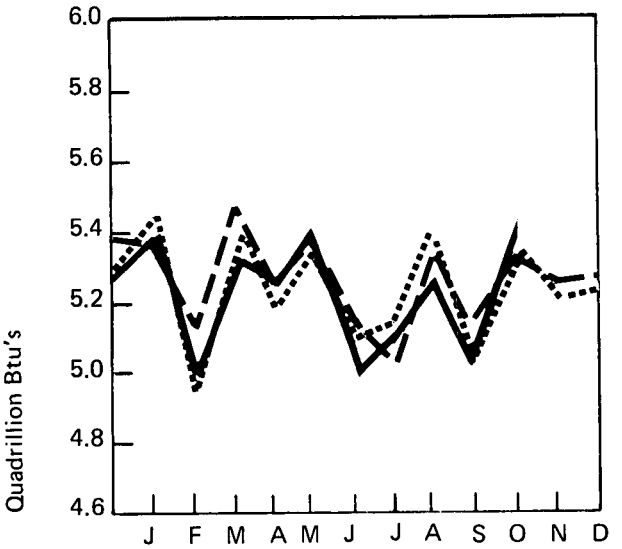
Production of electricity at public utilities, which shows a seasonal peak during the summer, was essentially unchanged during October from the previous month, while cumulative production remained about 1 percent below a year ago. As a consequence of both the decrease in production and a large increase in output from nuclear plants, consumption of fossil fuels at utility plants for the first 9 months of the year was down considerably from 1973 level. Oil and gas consumption declined 7 percent and 11 percent, respectively, while only a slight increase was posted for coal. The stocks position of the utilities at the end of September represented a considerable improvement over 1973. Oil stocks have been steadily growing for more than a year and a half now and were equivalent to a 76-day supply. Coal stocks compared favorably with levels held a year ago, representing on the average a 90-day supply.

Wholesale and retail prices of motor gasoline during October continued their downward trend, while a survey of major oil companies indicated that consumer heating oil prices increased somewhat during the month. The average retail price of regular gasoline fell 1.8 cents per gallon from its September level, the largest decrease since retail prices began to decline in August. Furthermore, independent gasoline retailers continued to lower their selling prices by larger amounts than major brand retailers, with a price differential of 3.1 cents per gallon noted during October. The estimated refiner acquisition cost of imported crude petroleum declined again during September, down 16 cents per gallon from the August level. The price paid by refiners for domestic crude petroleum in September did not change substantially from the previous month.

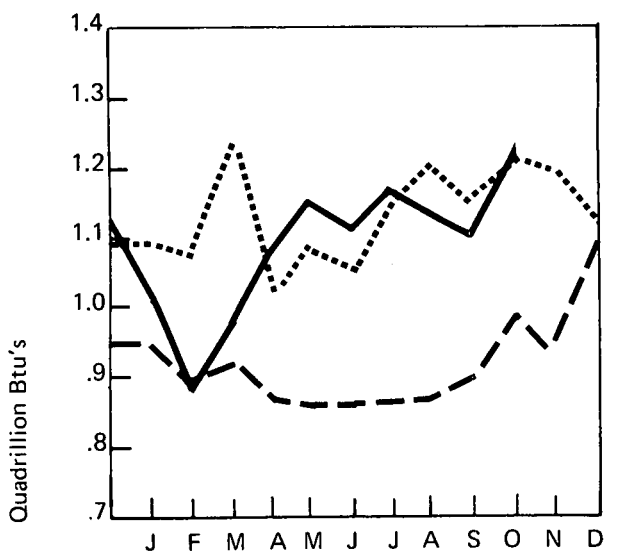
In resource development, oil and gas exploration activity remained well ahead of last year's levels. The average number of seismic crews engaged in petroleum prospecting through October represented an increase of almost 30 percent over the 1973 average, while the current-month count of rotary rigs drilling for oil and gas was at its highest level in more than 10 years. Accordingly, total well completions for the first 10 months were up 21.3 percent from the completion level during the comparable period in 1973. Total footage of wells drilled posted a gain of 13.7 percent over this time period. Hopes for sustaining this high level of exploratory activity have been bolstered by the results of a McGraw-Hill survey which indicated that the oil industry is anticipating a 49-percent

increase in capital expenditures related to production in 1975 over amounts estimated for 1974.

Domestic Production of Energy*



Imports of Fossil Fuels



1972
1973
1974

*See Explanatory Note 1.

Part 2

Energy Sources

Crude Petroleum and Petroleum Products

Both the time-series data format and the graphic presentation for the sections on Crude Oil and major refined products (Total Refined Petroleum Products, Motor Gasoline, Jet Fuel, and Distillate and Residual Fuel Oil) have been modified in this issue. Bureau of Mines (BOM) time-series data will now be shown parallel with FEA data through the latest month for which BOM data are available. Except for Crude Oil Domestic Production, FEA's statistical series begin in May 1974. It was during this month that FEA began publishing the *Weekly Petroleum Statistics Report* which presents volumetric data on domestic petroleum receipts and imports for all refiners and bulk terminal operators, as well as production and stock levels for each major petroleum product. FEA statistics for Domestic Production of Crude Oil were not available until July 1974.

Conceptually, the major differences between FEA and BOM data occurs in the "stocks" series. Stock levels reported by FEA for the major petroleum products are higher than those reported by BOM, because the FEA series includes stocks of independent terminal operators not counted by BOM.

	Crude Input to Refineries		Domestic Production		Imports		Stocks*	
	In thousands of barrels per day						In thousands of barrels	
1972	BOM	FEA	BOM	FEA	BOM	FEA	BOM	FEA
January	11,388		9,114		2,046		236,776	
February	11,356		9,336		2,081		238,882	
March	11,345		9,462		2,067		244,860	
April	11,184		9,513		2,004		253,492	
May	11,478		9,614		2,160		265,305	
June	11,841		9,522		2,085		257,601	
July	11,885		9,496		2,182		251,913	
August	11,915		9,483		2,112		244,333	
September	12,112		9,508		2,364		237,085	
October	11,871		9,482		2,516		239,949	
November	11,851		9,426		2,299		237,519	
December	12,113		9,335		2,667		232,803	
1973								
January	12,190		9,179		2,732		224,056	
February	12,187		9,373		2,873		221,893	
March	12,201		9,175		3,162		230,696	
April	12,208		9,233		3,049		235,383	
May	12,281		9,303		3,215		244,777	
June	12,862		9,209		3,220		235,846	
July	12,750		9,195		3,501		230,750	
August	12,636		9,161		3,593		235,660	
September	12,560		9,077		3,471		228,280	
October	12,758		9,172		3,740		233,520	
November	12,374		9,144		3,452		237,001	
December	12,150		9,041		2,891		229,504	
1974								
January	11,491		8,907		2,382		220,261	
February	11,102		9,156		2,248		228,004	
March	11,355		8,950		2,462		231,705	
April	11,823		8,952		3,267		243,687	
May	12,333	12,777	8,903		3,908	3,748	256,726	252,270
June	12,697	12,709	8,777		3,925	3,957	255,762	253,008
July	12,811	12,905	8,754	8,698	4,091	4,167	255,936	252,399
August	12,644	12,731	8,682	8,717	3,924	3,852	251,905	247,406
September		R12,253		8,622		3,758		R250,487
October		**12,422		**8,638		**3,936		**254,847

*See definitions.
**Preliminary data.
R= Revised data.
Sources: Bureau of Mines (BOM) and Federal Energy Administration (FEA) as indicated.

Graphic presentations of volumetric data show BOM data for January 1972 through May 1974. FEA data are shown for May 1974 forward. In the case of Domestic Production of Crude Oil, BOM data are shown through July 1974.

Crude Oil

Crude oil production in October, at an average of 8,638,000 barrels per day, was essentially unchanged from the previous month. In early 1972 essentially all reservoirs were permitted to be produced at their maximum efficient rate of recovery for the first time in over two decades. From that time in 1972 until August 1973, the average monthly rate of decline (based on least squares computation) was 0.31 percent. Since August 1973 the monthly decline rate has been 0.46 percent. Between May 1972 and October 1974 crude oil production declined almost 1,000,000 barrels per day, with Texas and Louisiana accounting for 85 percent of the decrease.

After declining for 3 consecutive months, crude oil imports rose to 3,936,000 barrels per day in October as refiners increased refinery input to meet the expected

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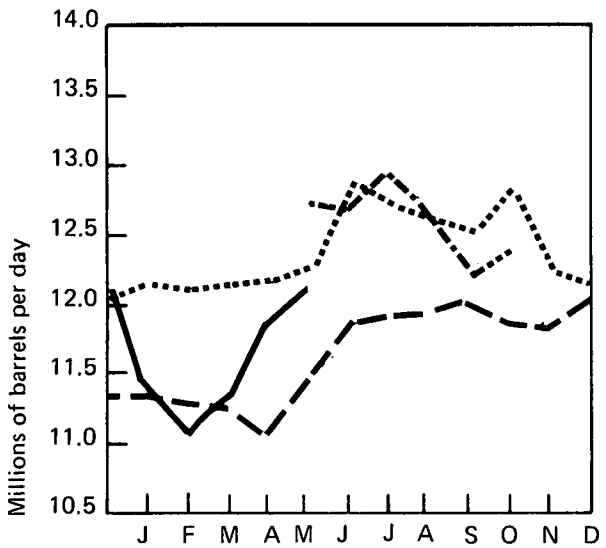
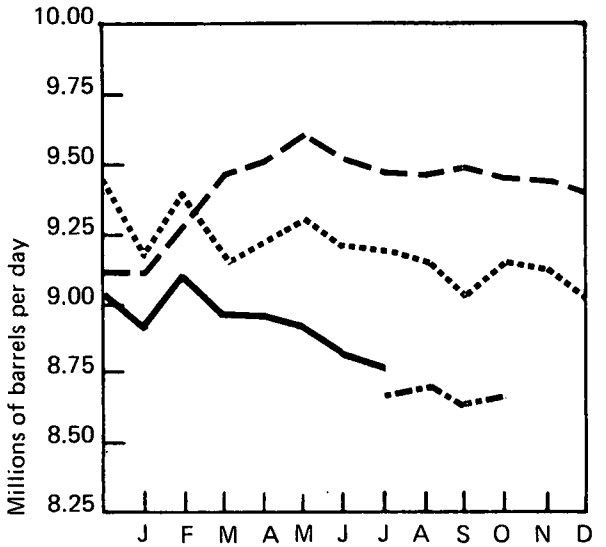
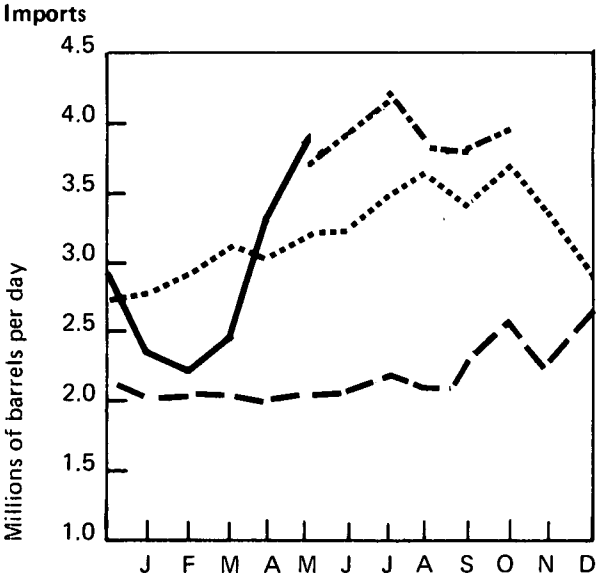
Crude Input to Refineries



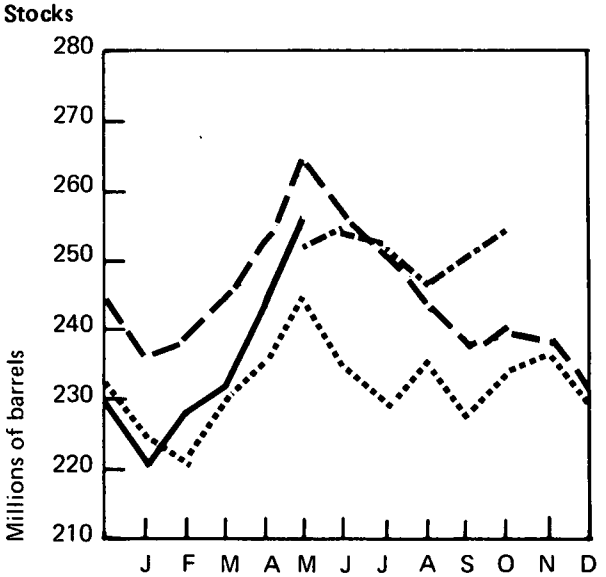
Domestic Production



Imports



Stocks



1972
1973
1974 BOM
1974 FEA

Crude Oil *(Continued)*

winter increase in demand. Despite efforts to lower imports by reducing demand, crude oil imports represent a growing share of crude oil supply. During October they accounted for 31 percent of the supply compared with 29 percent in October 1973, the last month in 1973 during which imports were not affected by the Arab embargo. Canada, Nigeria, Venezuela, and Saudi Arabia were the principal sources of imports, accounting for 61.9 percent of the total. Arab countries were the source of 19.5 percent while 57.7 percent came from OPEC countries. Imports of crude oil from Canada were down somewhat as high export taxes make it increasingly difficult for Canadian crude to compete with U.S. domestic crudes in the northern Midwest. Moreover, the United States is expected to be importing much less from Canada in the near future. On November 25, 1974, the Canadian Government announced that crude oil exports to the United States, which averaged about 900,000 barrels per day in 1974, would be phased out by 1983 if Canada's self-sufficiency position does not improve.

Crude oil stocks at the end of the month were 254,847,000 barrels, the highest level for an October since 1971 and equivalent to a 20.5-day supply. This level is far below the 23.9-day supply in October 1971, but compares favorably with the 18.3-day supply held in October 1973.

Total Refined Petroleum Products

	Domestic Demand		Imports*	
	In thousands of barrels per day			
1972	BOM	FEA	BOM	FEA
January	16,735		2,721	
February	17,861		2,764	
March	16,870		2,730	
April	15,529		2,298	
May	14,801		2,208	
June	15,615		2,382	
July	14,821		2,215	
August	15,936		2,344	
September	15,489		2,342	
October	16,455		2,607	
November	17,610		2,653	
December	18,738		3,039	
1973				
January	18,667		3,079	
February	18,941		3,501	
March	17,193		3,413	
April	15,924		2,540	
May	16,603		2,603	
June	16,471		2,659	
July	16,387		2,671	
August	17,414		2,913	
September	16,620		2,903	
October	17,095		2,785	
November	18,434		3,412	
December	17,429		3,055	
1974				
January	17,270		2,973	
February	17,371		2,973	
March	16,045		2,753	
April	15,919		2,703	
May	15,270	15,624	2,580	2,454
June	16,176	16,459	2,493	2,218
July	16,301	16,156	2,397	2,143
August	16,546	16,221	2,434	2,281
September		R16,372		2,180
October		**17,644		**2,744

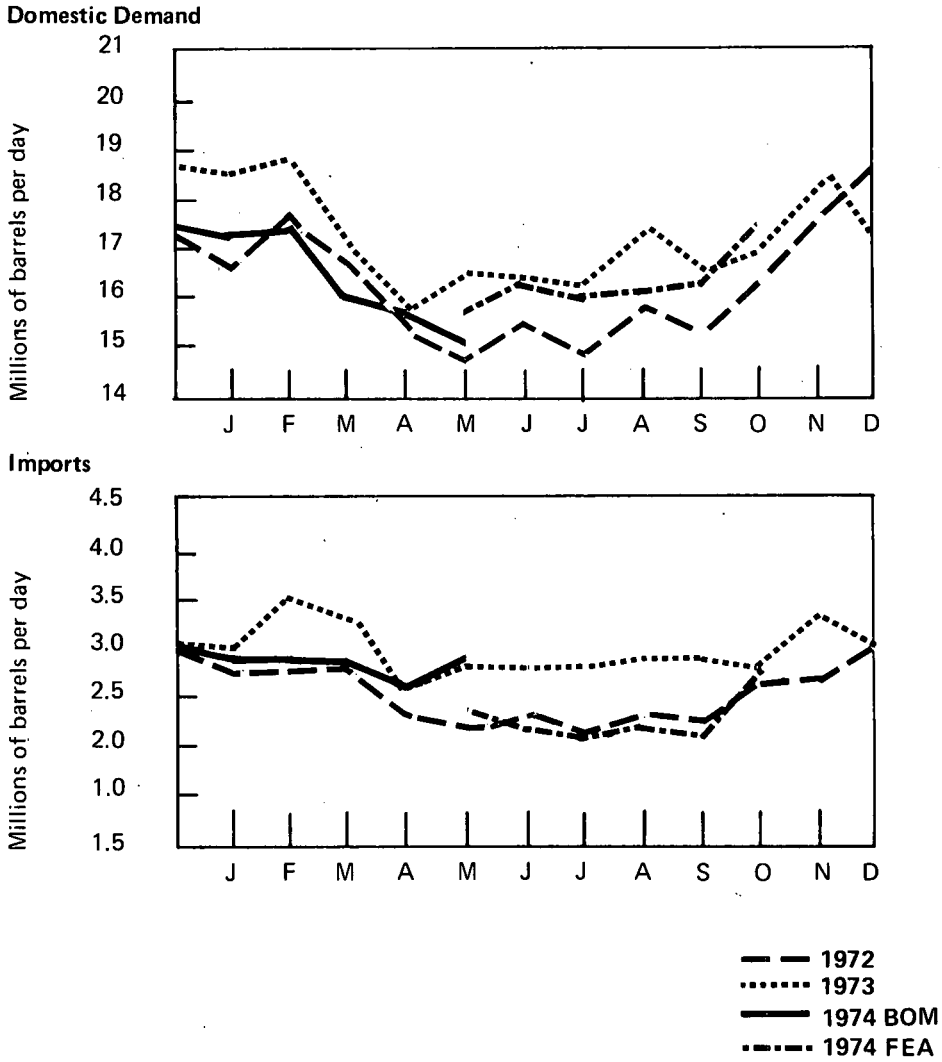
*See definitions. **Preliminary data. R = Revised data.
Sources: Bureau of Mines (BOM) and Federal Energy Administration (FEA) as indicated.

Total Refined Petroleum Products

During October, apparent demand for refined petroleum products averaged 17,644,000 barrels per day, the highest average for any month in the year so far. It exceeded September by 7.8 percent and October 1973 by 3.3 percent. During the period May through October 1974 (the first 6-month period in 1974 unaffected by the embargo), refined petroleum product demand averaged 16,413,000 barrels per day which was 2.1 percent below demand during the same period of 1973. Since most forecasts of demand for this period anticipated an increase of about 7.0 percent over 1973, conservation programs, price increases, and fuel conversion projects seem to have caused a net reduction in demand of 9.0 percent.

Normally, product imports in the fourth quarter of each year are somewhat larger than those of the third quarter. However, the increase in October was a substantial 594,000 barrels per day, the second largest monthly increase (after December 1971) in U.S. history.

The increase in product imports during October was equivalent to nearly half of the 7.8 percent increase in demand. This vividly demonstrates the use of imports to meet a major share of seasonal fluctuations in demand.



Motor Gasoline

Domestic demand for motor gasoline during the period January through October 1974 was 6,481,000 barrels per day, a decrease of 3.3 percent from the same period in 1973 but an increase of 1.8 percent over the level for those months during 1972. October demand dropped seasonally 1.6 percent from the previous month, continuing a downward trend that has now lasted 3 months.

Refinery production of motor gasoline for the first 10 months of 1974 averaged 6,354,000 barrels per day. Similar to demand trends, this was 3.5 percent below the corresponding period in 1973 but 1.7 percent higher than in 1972.

Imports of motor gasoline, which are only a small portion of total gasoline supply, fluctuate considerably month to month, showing no real seasonality. October 1974 imports exceeded those for the previous month by 17.9 percent. Year-to-date trends show a growth in imports of 56.1 percent over levels experienced during the first 10 months of 1973. This figure is not as great, however, as the increase posted last year, when imports for January through October were 73.8 percent higher than the level for the comparable period in 1972.

	Domestic Demand		Production		Imports		Stocks* In thousands of barrels	
	In thousands of barrels per day							
1972	BOM	FEA	BOM	FEA	BOM	FEA	BOM	FEA
January	5,549		6,151		51		239,633	
February	5,710		5,989		66		249,927	
March	6,412		5,913		67		236,831	
April	6,283		5,833		52		225,153	
May	6,445		6,023		74		214,736	
June	6,822		6,244		75		200,143	
July	6,673		6,612		69		200,710	
August	6,938		6,588		81		192,706	
September	6,453		6,605		70		199,690	
October	6,350		6,532		71		207,776	
November	6,479		6,436		69		208,930	
December	6,378		6,424		69		212,770	
1973								
January	6,118		6,341		59		221,823	
February	6,437		6,141		95		216,367	
March	6,513		6,150		71		207,581	
April	6,541		6,377		63		204,708	
May	6,907		6,714		102		202,081	
June	6,964		6,993		174		208,374	
July	7,023		6,986		133		211,488	
August	7,249		6,880		157		205,122	
September	6,581		6,620		127		210,278	
October	6,677		6,621		194		214,525	
November	6,823		6,375		216		207,343	
December	6,223		6,099		188		209,395	
1974								
January	5,804		5,900		163		217,463	
February	6,100		5,969		184		219,058	
March	6,162		5,982		225		220,307	
April	6,457		6,311		260		223,752	
May	6,745	6,406	6,328	6,301	250	228	218,670	229,878
June	6,919	6,895	6,663	6,642	211	145	217,381	226,652
July	6,959	6,941	6,792	6,835	212	122	218,838	227,195
August	7,061	6,849	6,815	6,776	253	192	218,951	231,015
September		R6,652		R6,485		140		R230,181
October		**6,543		**6,339		**175		**228,831

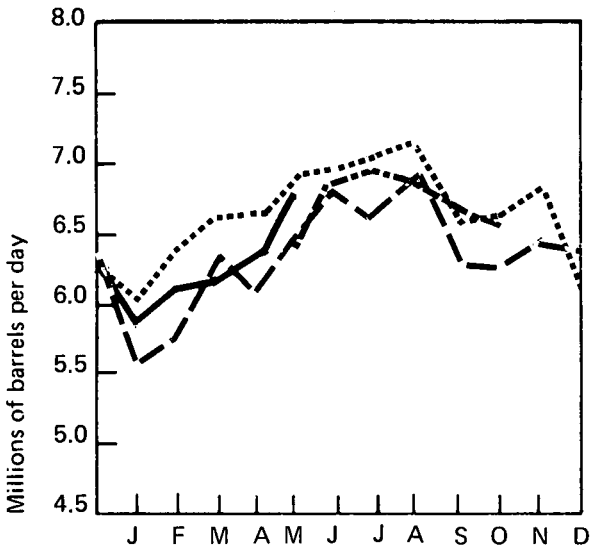
*See definitions. **Preliminary data. R = Revised data.

Sources: Bureau of Mines (BOM) and Federal Energy Administration (FEA) as indicated.

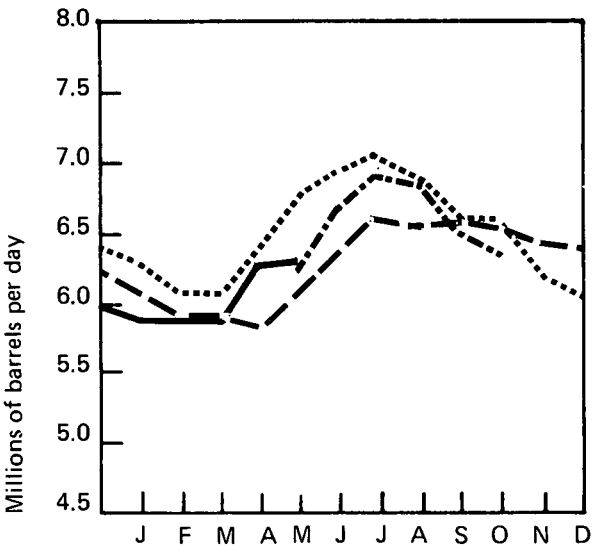
It is noteworthy that since 1972 there has been a significant increase in the volume of motor gasoline imported from non-Communist Europe. In 1972, an average of 1,400 barrels per day, or 2.1 percent of U.S. motor gasoline imports, came from refineries in non-Communist Europe. In 1973, imports from this area rose to 18,600 barrels per day, or 14.1 percent of the total, and during the first half of 1974 this figure reached a level of 65,200 barrels per day, accounting for 30.2 percent of total U.S. motor gasoline imports.

Inventories of motor gasoline declined slightly from the previous month, but were, nevertheless, 6.7 percent greater than stock levels for October of the previous year and 10.1 percent greater than those of October 1972.

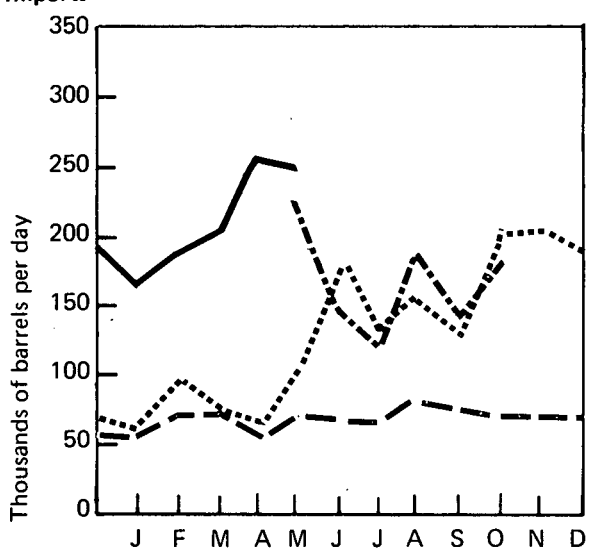
Domestic Demand



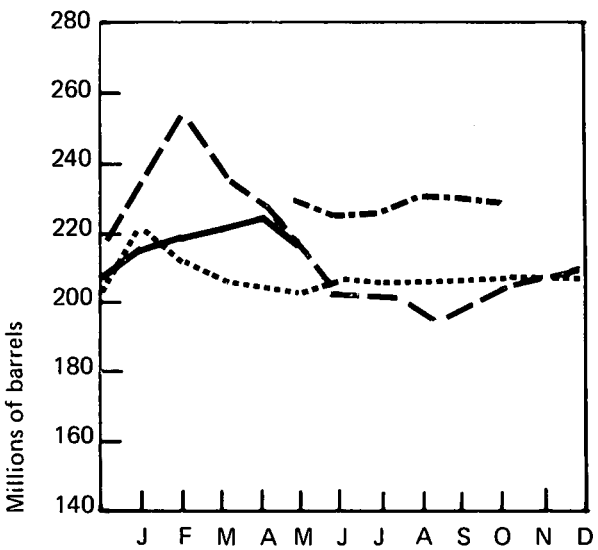
Production



Imports



Stocks



Jet Fuel

Apparent demand for jet fuel remained relatively unchanged for the third month in a row. October 1974 demand was 2.4 percent higher than October 1973 but was 6.8 percent lower than October 1972. Following the lifting of the Arab oil embargo in March, demand showed a gradual upward trend for the next 6 months, reaching pre-embargo levels by August. However, average demand for January through October was 6.4 percent below the same period last year and 5.6 percent below 1972. Conservation practices initiated during the embargo period, as well as higher air fares, have remained a constraining factor on aircraft fuel consumption.

October 1974 production of jet fuel at 905,000 barrels per day increased 2.5 percent over September 1974 and was 3.4 percent higher than in October 1973. Production of kerosine-type jet fuel, which is used primarily in commercial aircraft, accounted for 77.9 percent of total jet fuel production in October compared with 80.5 percent in the same month last year.

Imports of jet fuel in October 1974 were slightly higher than September 1974 but virtually unchanged from October 1973. Imports for the first 10 months of 1974,

	Domestic Demand		Production		Imports		Stocks	
	In thousands of barrels per day						In thousands of barrels	
1972	BOM	FEA	BOM	FEA	BOM	FEA	BOM	FEA
January	1,021		784		179		25,857	
February	1,141		900		220		25,230	
March	1,008		906		167		27,147	
April	986		877		124		27,568	
May	999		887		159		23,885	
June	1,163		859		292		28,356	
July	1,000		873		165		29,429	
August	946		837		181		31,649	
September	1,035		810		190		30,597	
October	1,171		822		286		28,633	
November	1,050		800		184		26,650	
December	1,030		811		189		25,493	
1973								
January	1,110		864		231		24,814	
February	1,090		898		221		25,437	
March	993		917		152		27,585	
April	1,015		887		145		27,881	
May	1,113		840		211		25,825	
June	1,007		836		163		25,447	
July	1,045		825		231		25,661	
August	1,049		844		180		24,851	
September	1,065		847		229		25,149	
October	1,066		875		208		25,577	
November	1,013		852		263		28,539	
December	1,038		830		210		28,544	
1974								
January	895		800		136		29,732	
February	860		783		75		29,617	
March	956		832		139		29,996	
April	941		868		132		31,725	
May	1,053	915	868	873	205	97	32,324	33,574
June	952	1,016	810	886	141	115	32,200	33,128
July	1,028	1,032	802	813	214	188	31,671	32,231
August	1,031	1,076	805	849	206	202	30,989	31,594
September		R1,100		R883		R183		R30,587
October		*1,092		*905		*216		*31,495

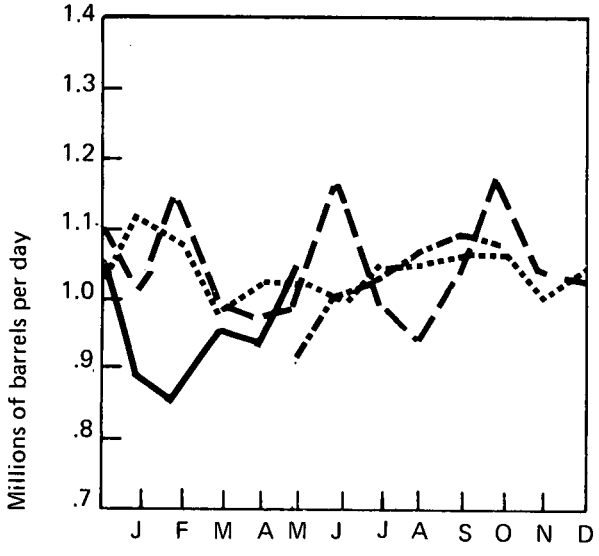
*Preliminary data. R=Revised data.

Sources: Bureau of Mines (BOM) and Federal Energy Administration (FEA) as indicated.

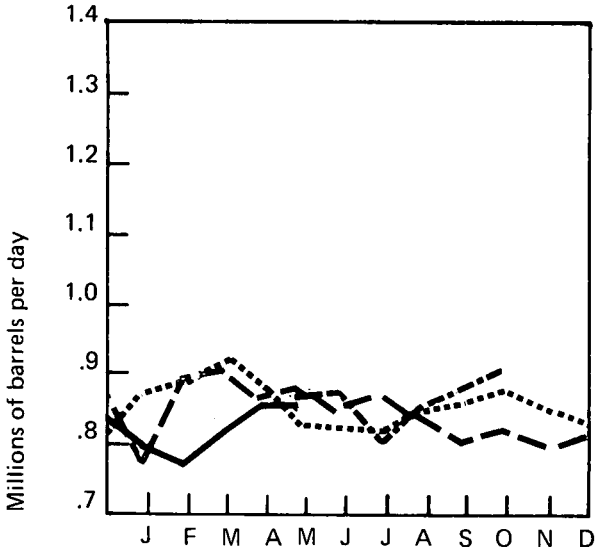
at 148,000 barrels per day, however, were 24.8 percent lower than the same period in 1973.

Inventories at the end of October enclosed 0.9 million barrels higher than September levels and 5.9 million barrels above October 1973. Stocks of kerosine-type jet fuel in October 1974 accounted for 79.7 percent of total jet fuel inventories, as compared with the October 1973 figure of 83.4 percent.

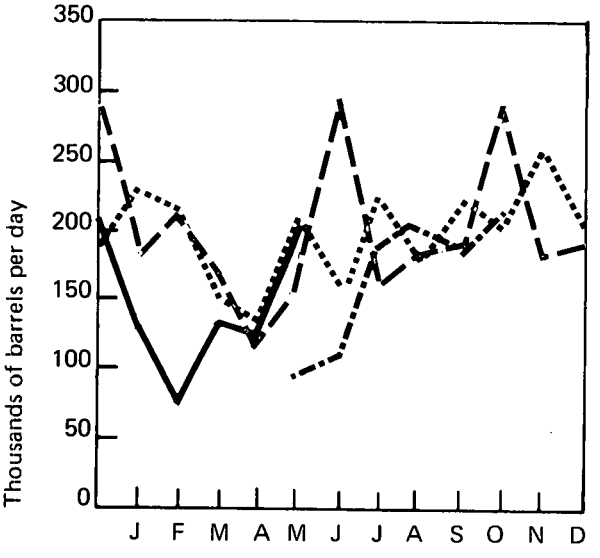
Domestic Demand



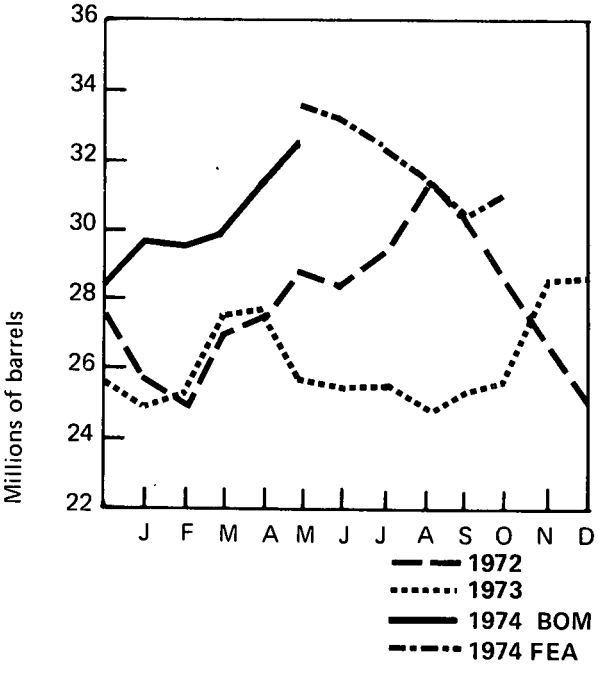
Production



Imports



Stocks



Distillate Fuel Oil

Domestic demand for distillate fuel oil in October 1974 increased 14.1 percent over the level for the previous month but was 3.3 percent below October 1973, due to higher prices and conservation efforts. Average demand for the first 10 months of 1974 was 5.1 percent lower than the corresponding period in 1973, but 3.5 percent higher than in 1972.

October 1974 distillate fuel oil production was 115,000 barrels per day (4.0 percent) below the level for October 1973. The 10-month average of distillate production was 109,000 barrels per day or 3.9 percent lower than 1973, but 3.1 percent higher than 1972.

October distillate imports were higher than those for September 1974 but were 39.5 percent below October 1973. Distillate fuel imports for the first 10 months of 1974 have averaged 35.0 percent below 1973.

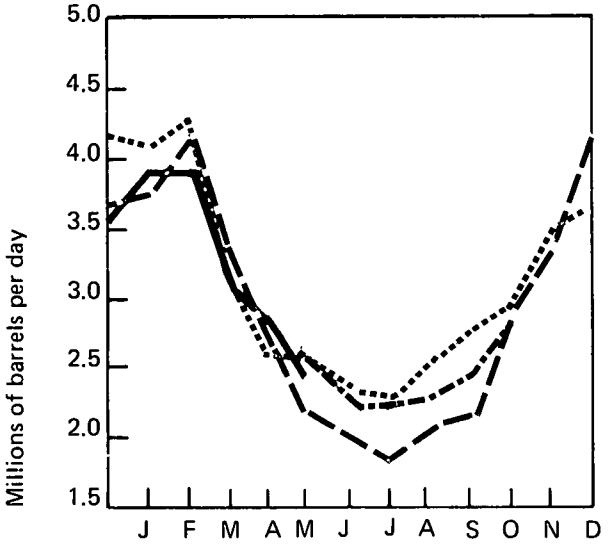
Inventories of distillate fuel oil in October increased by 6.9 million barrels or 3.0 percent over the previous month. This stock increase compares with increases of 2.8 percent and 6.7 percent experienced for the corresponding months in 1972 and 1973, respectively.

	Domestic Demand	Production*		Imports		Stocks*	
	In thousands of barrels per day					In thousands of barrels	
1972	BOM FEA	BOM	FEA	BOM	FEA	BOM	FEA
January	3,723	2,538		197		160,027	
February	4,164	2,653		204		122,154	
March	3,482	2,564		257		101,728	
April	2,778	2,476		189		98,288	
May	2,250	2,585		132		112,892	
June	2,194	2,623		96		128,739	
July	1,765	2,529		97		155,557	
August	2,064	2,582		92		174,674	
September	2,205	2,624		99		190,250	
October	2,759	2,722		203		195,530	
November	3,383	2,719		227		182,581	
December	4,232	2,938		382		154,284	
1973							
January	4,134	3,028		360		130,958	
February	4,243	2,937		672		113,276	
March	3,314	2,667		579		111,270	
April	2,635	2,510		240		114,698	
May	2,652	2,544		247		119,104	
June	2,412	2,825		215		137,844	
July	2,329	2,752		319		160,869	
August	2,554	2,801		286		177,271	
September	2,660	2,813		298		190,171	
October	2,916	2,911		436		202,965	
November	3,508	2,922		493		200,182	
December	3,685	3,136		434		196,421	
1974							
January	3,820	2,880		449		181,179	
February	3,835	2,399		293		149,125	
March	3,145	2,226		267		128,822	
April	2,848	2,522		216		125,553	
May	2,453 2,616	2,704	2,741	271	288	141,806	151,345
June	2,386 2,249	2,783	2,818	228	175	160,645	173,639
July	2,302 2,251	2,792	2,881	214	168	182,458	198,374
August	2,295 2,271	2,704	2,779	111	112	198,673	217,632
September	R2,473		2,655		R143		R227,069
October	**2,822		**2,796		**264		**233,966

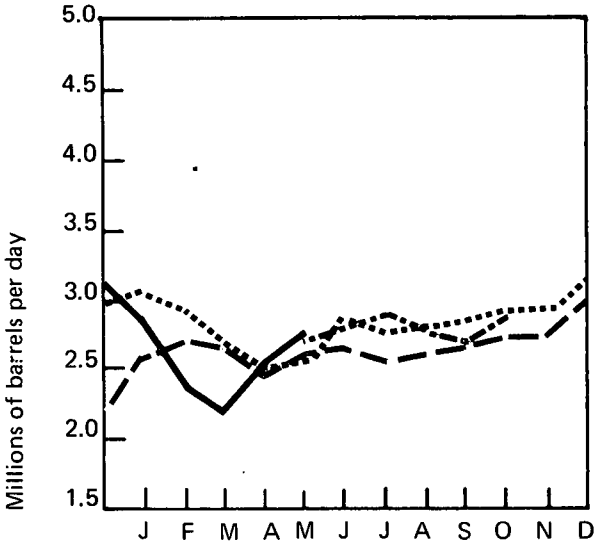
*See definitions. **Preliminary data. R = Revised data.

Sources: Bureau of Mines (BOM) and Federal Energy Administration (FEA) as indicated.

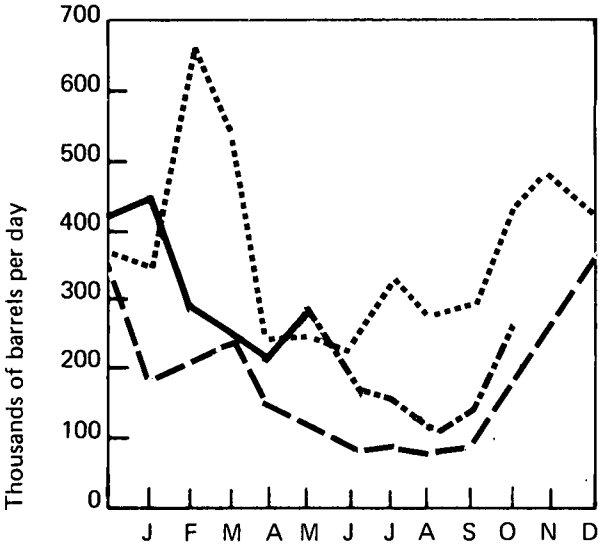
Domestic Demand



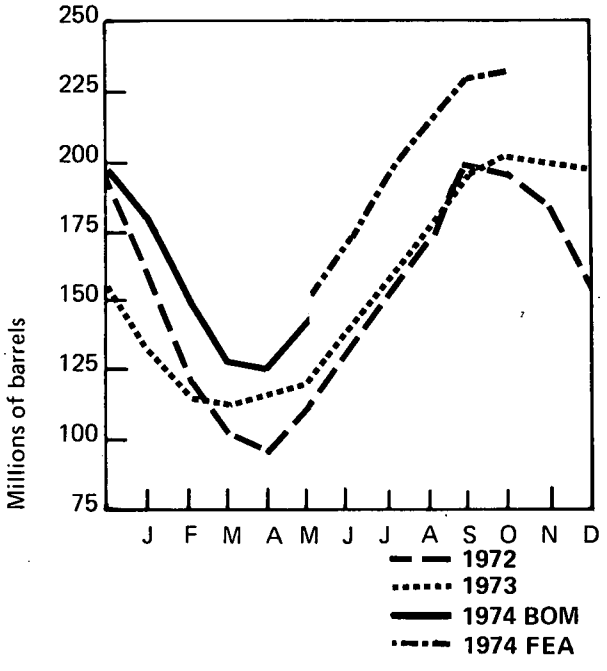
Production



Imports



Stocks



Residual Fuel Oil

Domestic demand for residual fuel oil in October 1974 was 88,000 barrels per day (3.5 percent) above the level for the previous month. However, average demand for January through October 1974 was 285,000 barrels per day (10.4 percent) below the corresponding period in 1973. Domestic demand for the current month was slightly less than that for October 1973, but it was 6.1 percent higher than demand during October 1972.

Residual fuel oil production in October increased 3.0 percent over September and was 12.0 percent higher than October 1973. Average production of residual fuel oil for the first 10 months of this year of 1,044,000 barrels per day was 10.5 percent and 37.7 percent greater than that for the same periods in 1973 and 1972, respectively. This increased output is the result of a rise in the consumption of residual by electric utility companies. In 1972 residual used for the production of electricity accounted for 47.0 percent of total residual consumption. The corresponding figure in 1973 was 49.9 percent.

Imports of residual fuel oil increased in October by 7.4 percent over September, but were still running about 200,000 to 300,000 barrels per day below the levels of 1973 and 1972. With the decline in residual demand and the increase in domestic production experienced so far

	Domestic Demand		Production		Imports		Stocks	
	In thousands of barrels per day						In thousands of barrels	
1972	BOM	FEA	BOM	FEA	BOM	FEA	BOM	FEA
January	2,815		924		1,892		59,440	
February	3,171		963		1,923		50,891	
March	2,682		828		1,926		51,566	
April	2,444		739		1,676		49,425	
May	2,111		664		1,573		53,035	
June	2,196		661		1,649		56,109	
July	2,107		673		1,594		60,230	
August	2,257		674		1,653		61,399	
September	2,239		710		1,625		63,692	
October	2,362		745		1,655		63,758	
November	2,843		890		1,769		57,702	
December	3,151		1,124		1,968		55,216	
1973								
January	3,262		1,112		1,977		49,154	
February	3,305		1,038		2,072		43,058	
March	3,071		955		2,185		44,711	
April	2,472		877		1,703		47,044	
May	2,518		948		1,666		49,207	
June	2,602		915		1,757		51,811	
July	2,430		882		1,597		53,363	
August	2,690		851		1,850		53,586	
September	2,667		878		1,842		55,091	
October	2,547		984		1,556		54,964	
November	3,118		1,061		1,942		51,985	
December	2,910		1,158		1,793		53,480	
1974								
January	3,035		1,072		1,732		46,548	
February	3,010		1,029		1,923		45,004	
March	2,516		912		1,674		47,222	
April	2,432		984		1,587		51,339	
May	2,251	2,111	995	992	1,353	1,250	54,356	64,548
June	2,455	2,177	1,026	1,058	1,549	1,260	57,891	68,646
July	2,432	2,135	1,056	1,091	1,433	1,197	59,787	73,066
August	2,539	2,368	1,067	1,126	1,530	1,342	60,988	76,011
September		R2,419		1,070		R1,274		R72,723
October		*2,507		*1,103		*1,369		*71,652

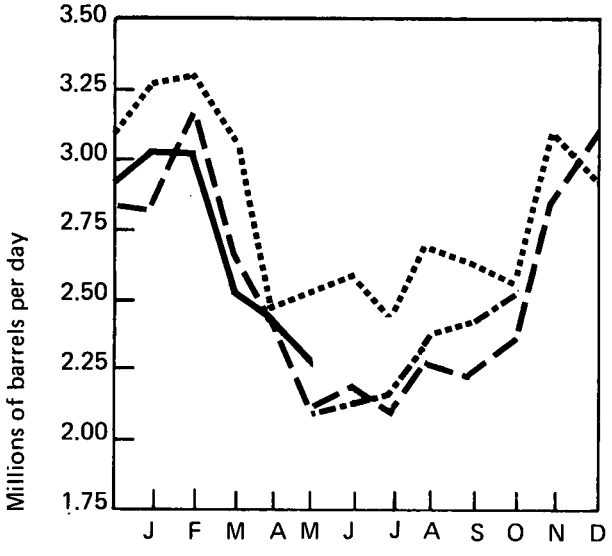
*Preliminary data. R = Revised data.

Sources: Bureau of Mines (BOM) and Federal Energy Administration (FEA) as indicated.

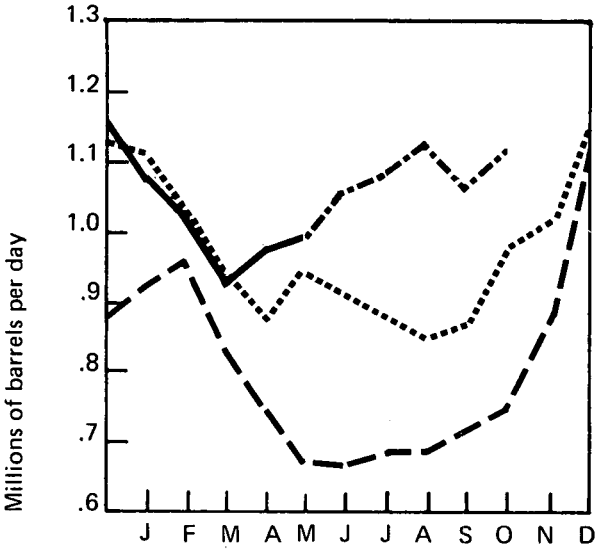
this year, there is no apparent need to import residual fuel at levels comparable to the previous 2 years.

Inventories of residual fuel oil declined for the second consecutive month as the peak demand winter heating season began. Stocks held by deepwater terminal operators on the East Coast accounted for approximately 18.0 percent of total residual stocks.

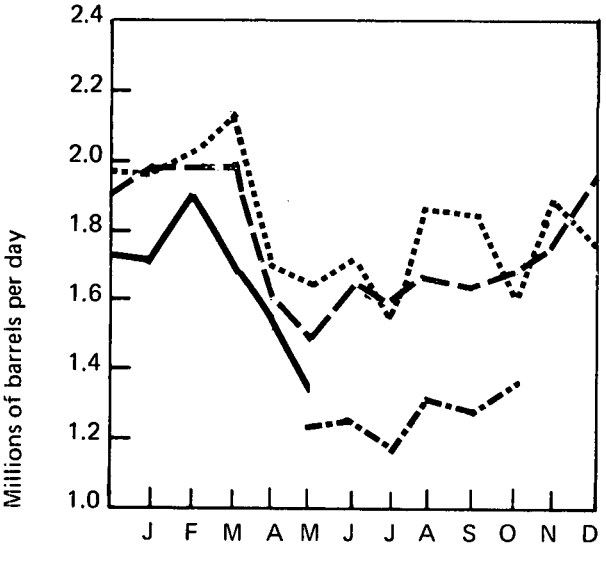
Domestic Demand



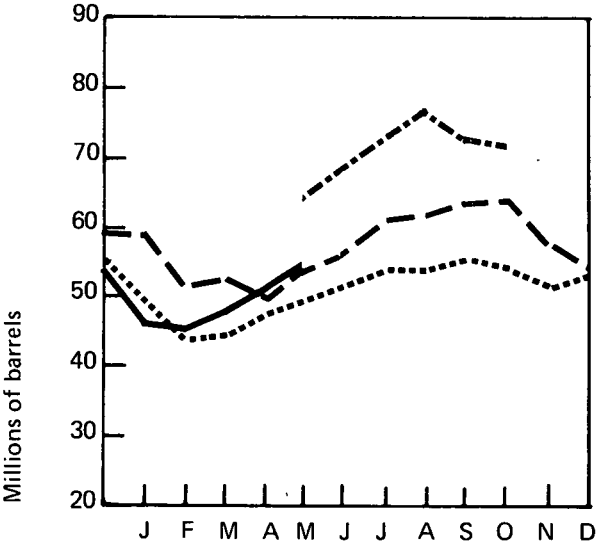
Production



Imports



Stocks



1972
1973
1974 BOM
1974 FEA

Natural Gas Liquids

This section on natural gas liquids has been expanded for the December 1974 issue, with the new format to be continued as a regular feature. Historical time-series data have been introduced in two categories: total domestic demand and total imports.

Data published under these new categories exhibit declines when the first 8 months of 1974 are compared with the same period in 1973. Imports were down 7.1 percent while domestic demand was 3.6 percent lower. Data for the month of August for these two categories show an even greater decline relative to last year. Domestic demand slipped 3.7 percent below the August 1973 mark, while imports dropped 27.9 percent.

Reflecting a strong seasonal influence, stock levels at the end of August 1974 continued to surge upward, closing 6 million barrels above July. Moreover, stocks were 26.4 percent and 19.8 percent above levels for the same month in 1973 and 1972, respectively. Production, although slightly higher than the July 1974 mark, was 4.1 percent below August 1973.

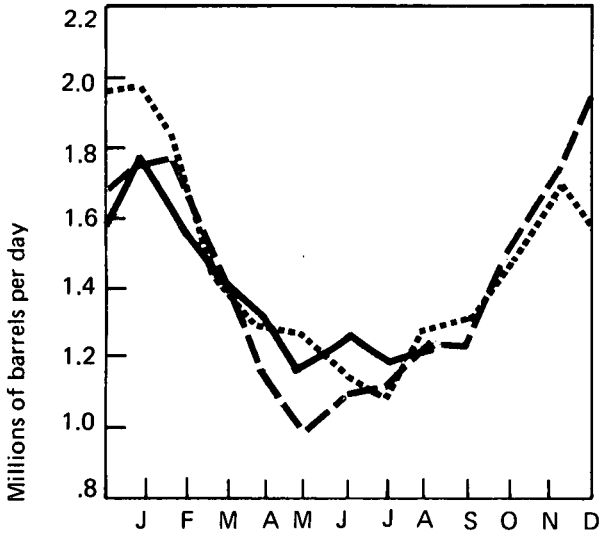
At a recent meeting of the FEA LP-Gas Advisory Committee, industry representatives indicated that a large portion of propane stocks, which comprise approximately

	Domestic Demand*	Production*	Imports	Stocks*
	In thousands of barrels per day			In thousands of barrels
1972				
January	1,746	1,705	196	76,704
February	1,752	1,747	182	68,232
March	1,417	1,768	186	68,777
April	1,181	1,769	118	75,101
May	995	1,737	147	84,984
June	1,114	1,734	134	92,831
July	1,121	1,731	141	100,363
August	1,243	1,739	164	104,397
September	1,244	1,751	168	108,853
October	1,525	1,769	202	105,098
November	1,768	1,757	221	94,673
December	1,946	1,721	231	79,238
1973				
January	1,994	1,680	313	64,343
February	1,857	1,745	312	55,997
March	1,406	1,734	258	58,471
April	1,297	1,749	199	65,297
May	1,268	1,739	215	73,942
June	1,149	1,727	163	83,057
July	1,104	1,737	193	93,362
August	1,268	1,748	226	98,996
September	1,288	1,741	197	103,907
October	1,485	1,756	235	104,215
November	1,693	1,774	276	98,320
December	1,598	1,729	223	94,106
1974				
January	1,779	1,699	305	85,820
February	1,593	1,728	294	84,734
March	1,408	1,741	224	89,362
April	1,321	1,696	215	95,707
May	1,181	1,689	182	104,739
June	1,242	1,684	200	111,356
July	1,187	1,657	163	118,804
August	**1,221	**1,676	**163	**125,120

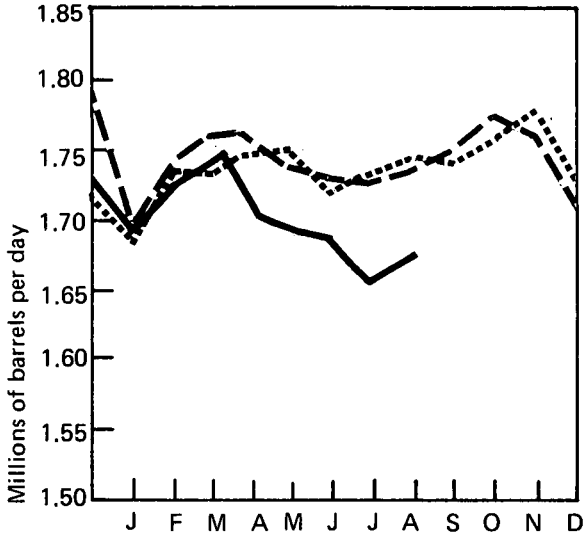
*See Explanatory Note 2.
**Preliminary data.
Source: Bureau of Mines.

61 percent of total natural gas liquids stocks, were being held by utilities for peak-shaving purposes and therefore were not considered to be available to the historical residential heating market.

Domestic Demand



Production



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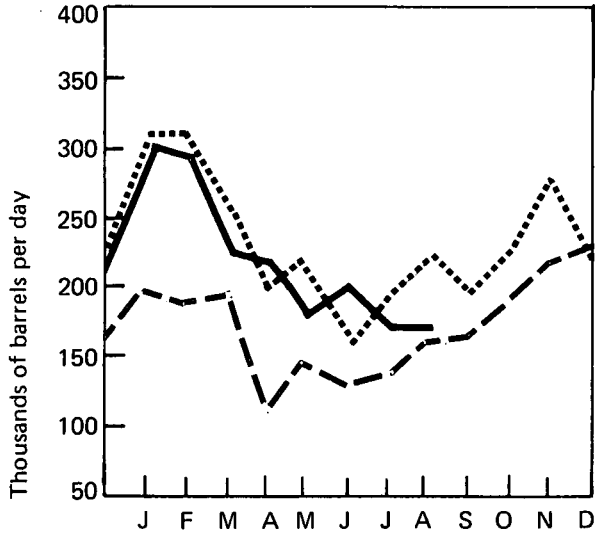
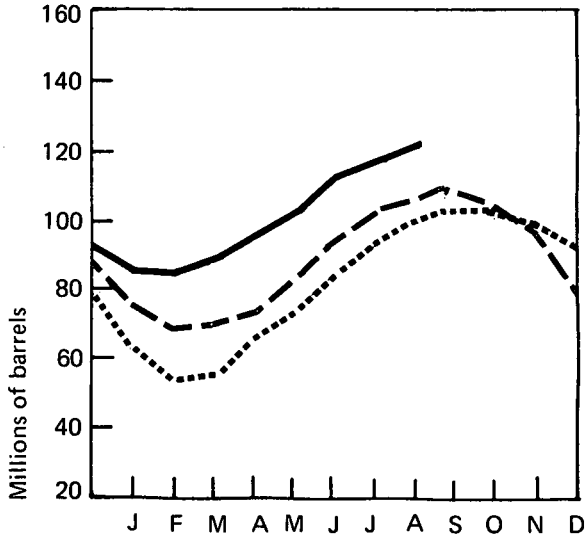


Stocks



1972
1973
1974

Natural Gas

Marketed production of natural gas in the United States fell again during the month of August. Whereas in both 1972 and 1973 August marketed production had increased slightly above July levels, in 1974 the August figure declined from the July level of 1,827 billion cubic feet to 1,793 billion cubic feet. Moreover, August 1974 marketed production was 5.5 percent below that for August 1973. This represented the largest single-month decline in production so far this year. Previously, monthly production had been averaging about 3 percent below levels posted during 1973.

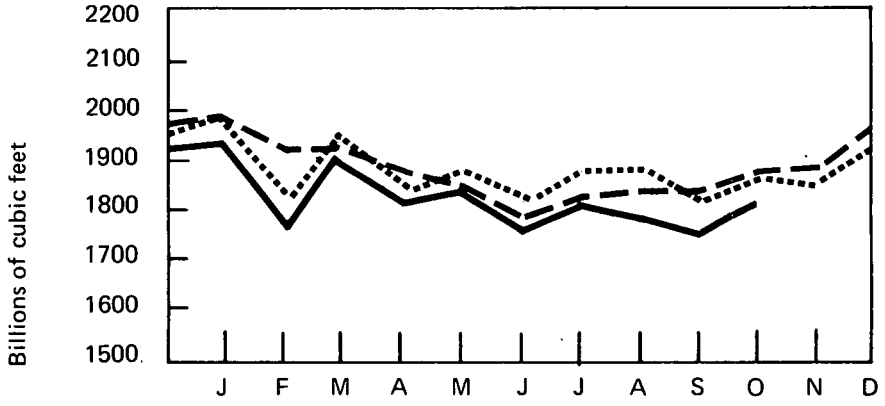
Imports of natural gas and domestic producer sales to interstate pipelines in August were also less than those for the corresponding month in 1973, by 10.5 and 1.6 percent, respectively.

On November 15, 1974, the Federal Power Commission issued a revised estimate of supply deficiencies as reported by the major interstate gas pipeline companies. Firm requirement deficiencies for the 1974-75 heating season (November through March) are now projected at 919 billion cubic feet, or 107 percent above last season's figure of 444 billion cubic feet. As was noted in the October *Monthly Energy Review,* the reduced availability of natural gas will place an increased burden on the need for alternative fuels.

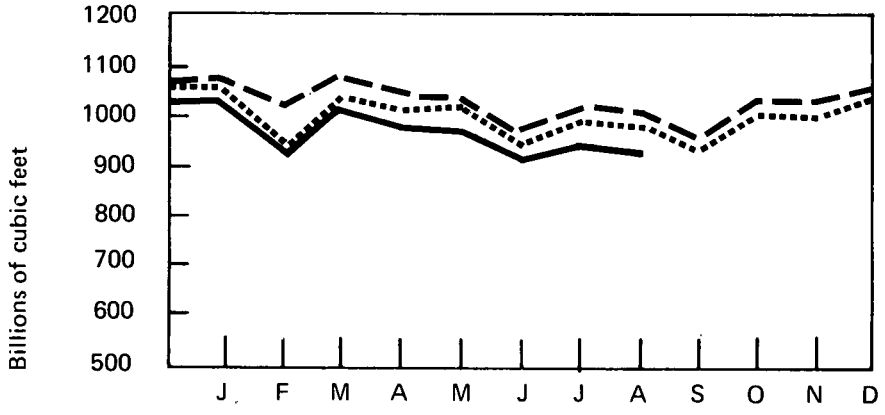
	Marketed Production	Domestic Producer Sales to Major Interstate Pipelines	Imports
		In billion cubic feet	
1972			
January	1,994	1,086	117
February	1,902	1,035	112
March	1,937	1,091	88
April	1,893	1,050	134
May	1,867	1,045	111
June	1,797	985	108
July	1,837	1,013	102
August	1,859	1,007	97
September	1,854	970	114
October	1,889	1,040	103
November	1,896	1,041	111
December	1,961	1,065	111
1973			
January	1,994	1,069	93
February	1,821	963	84
March	1,952	1,052	91
April	1,864	1,007	88
May	1,898	1,026	86
June	1,839	963	79
July	1,880	999	80
August	1,896	994	85
September	1,840	956	82
October	1,875	1,001	91
November	1,863	1,000	85
December	1,926	1,036	89
1974			
January	1,944	1,033	86
February	1,773	941	79
March	1,907	1,027	85
April	1,812	987	83
May	1,853	981	80
June	1,777	928	74
July	R1,827	947	74
August	R*1,793	932	R 76
September	R**1,760		R**75
October	**1,820		**82

*Preliminary data.
**Projected data.
R = Revised data.
Sources: Marketed Production and Imports — Bureau of Mines. Domestic Producer Sales — Federal Power Commission.

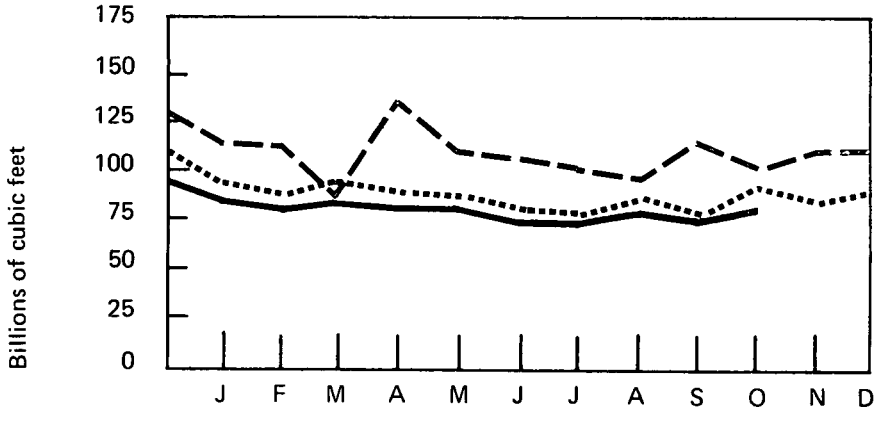
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports



1972
1973
1974

Coal

Production of bituminous coal and lignite in September 1974 totaled 52.5 million tons, a substantial increase of 4.1 million tons or 9 percent over September 1973. For the first 9 months of 1974 cumulative production at 463.2 million tons was up 24.3 million tons or about 5 percent from the level for the comparable period in 1973. Approximately 5 million tons or 1 percent was lost during August this year due to the 5-day miners' memorial work stoppage.

Coal consumption in September was 44.5 million tons, down 1 million tons or 2 percent from September 1973. However, for the first 9 months of this year, consumption was up slightly from 1973 levels, increasing by 1 percent or 5.4 million tons, to a cumulative total of 418.1 million tons. This growth is substantially less than the 8 percent increase experienced from 1972 to 1973.

September coal exports at 4.9 million tons were about 2 percent higher than the monthly average for the year-to-date. However, for the first 9 months of 1974, exports totaled 43.3 million tons, an increase of 6.4 million tons or 17 percent from the first 9 months of 1973. Japan, which imports only metallurgical coal, was the leading recipient of U.S. coal exports with 20.2 million tons, up 7.1 million tons or 54 percent from

Bituminous and Lignite

	Domestic Consumption*	Production**	Exports	Stocks
	In thousands of short tons			
1972				
January	43,951	49,680	3,660	92,908
February	43,178	49,112	3,630	93,648
March	43,773	54,438	4,624	97,855
April	40,158	49,814	4,915	103,701
May	40,588	52,879	5,416	110,597
June	40,505	50,083	4,882	114,493
July	43,071	40,964	3,627	109,733
August	44,698	52,169	6,337	112,865
September	42,002	49,374	4,923	114,346
October	43,050	51,671	5,173	117,995
November	44,104	50,297	5,380	119,211
December	47,698	44,904	3,392	115,372
1973				
January	49,838	49,379	2,954	108,590
February	44,652	45,893	2,669	106,422
March	44,814	50,547	3,377	109,065
April	42,689	46,999	5,063	110,861
May	43,627	51,420	5,140	114,511
June	45,115	46,613	4,969	107,616
July	47,706	43,801	4,164	105,027
August	48,840	55,874	5,125	R107,288
September	45,471	48,338	3,424	103,501
October	46,427	54,382	5,882	104,397
November	46,703	49,826	5,214	104,095
December	50,130	48,666	4,889	99,022
1974				
January	50,415	53,470	2,813	96,005
February	45,122	49,010	4,627	93,970
March	46,402	51,455	3,179	97,445
April	44,065	53,820	4,944	103,997
May	45,712	57,185	6,032	107,668
June	44,631	47,635	6,369	108,765
July	48,547	47,855	5,307	R106,491
August	R48,753	50,285	5,088	R105,810
September	***44,506	***52,460	***4,893	***109,205

*See Explanatory Note 3.
**See Explanatory Note 4.
***Preliminary data.
R = Revised data.

Source: Bureau of Mines.

1973. Japan accounted for almost one-half of U.S. exports during this period as opposed to about one-third in each of the past 3 years.

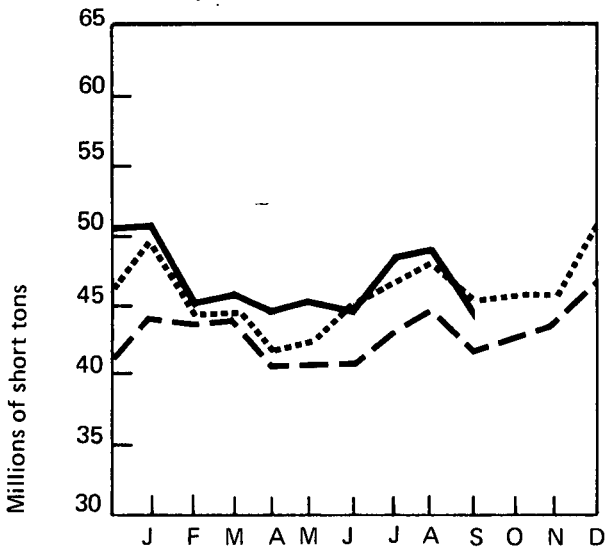
Coal stocks at the end of September of 109.2 million tons were up 3.4 million tons or 3 percent from levels at the end of August. Stock figures for August 1973 and July, August, and September 1974 have been revised upward by approximately 3 million tons because the sample of manufacturing plants has been enlarged. Reported inventories at these plants were greater than had previously been estimated.

At 12:01 a.m. on November 12, 1974, the estimated 120,000 members of the United Mine Workers of America (UMWA) began a strike because the terms of their new 3-year contract had not been settled.

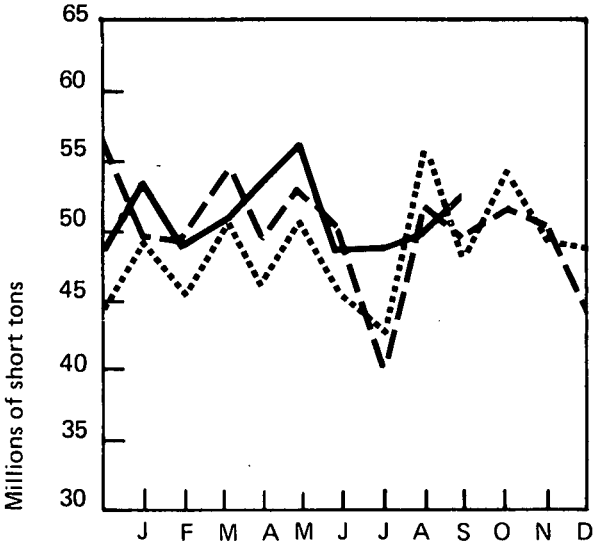
The impact of the coal strike on production was clearly evident in the latest BOM data. Production for the week ending November 16, 1974, was 7.3 million tons, down 7.0 million tons or 48.8 percent from the previous week. Based on the assumption that mines represented by UMWA account for 70 percent of total production, it is expected that production through November will register

(continued on next page)

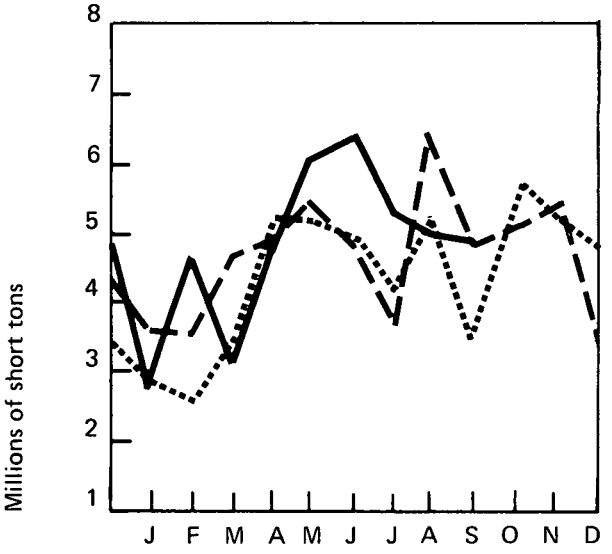
Domestic Consumption



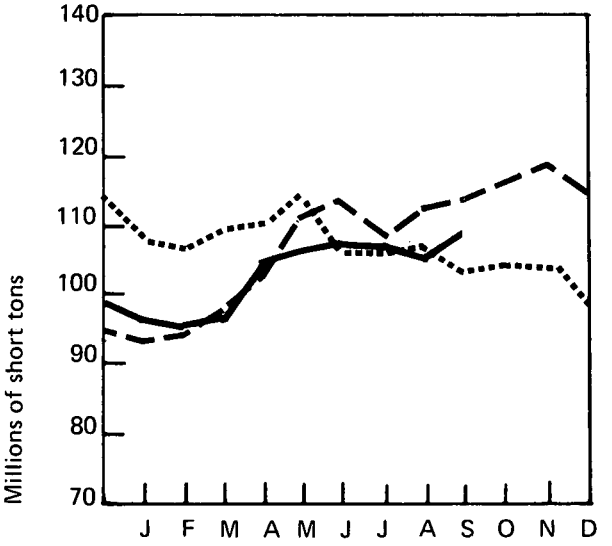
Production



Exports



Stocks



1972
1973
1974

further declines to a level approaching 30 percent of normal.

To date, the economic impact of the coal strike has been most keenly felt by the steel industry where announced layoffs approached 20,000 workers during November. Electric utilities, which account for about 70 percent of total domestic consumption, seem to be in a favorable position in all regions of the country to tolerate a short strike. Based on FEA projections of coal receipts, no major repercussions would be felt by the utility sector until around mid-January. Even regions of the country most susceptible to a disruption in utility coal supplies (Southeast, East Central, and Midwest) have on average a 75-day supply or more.

Part 3

Electric Utilities

Electric Utilities

This month's electric utility section has been expanded to include the percentage breakdown by energy source of total electricity production at utility plants. Future issues will continue to feature these data.

October electric energy production at 151,602 million kilowatt hours was relatively unchanged from the September level, which is typical for the moderate range of temperatures in the fall season. However, compared with October of the previous year, production was down 1.4 percent. Cumulative production for 1974 was also lower, about 1 percent below the same period in 1973.

September energy source data revealed that nuclear and hydroelectric power continued to increase their share of total electric energy production, especially nuclear, whose portion has expanded from 3.3 percent in September 1972 to 7.1 percent this September.

The mix of fossil fuels used for electric power generation during September differed significantly from that of a year ago. Oil and gas consumption by utilities were down

	Total Production	Percentage Produced from Each Source					
	In millions of kilowatt hours	Coal	Oil	Gas	Nuclear	Hydro-electric	Other *
1972							
January	144,575	45.4	17.9	16.6	2.9	16.9	0.3
February	R137,301	45.7	17.3	18.0	2.6	16.1	0.3
March	140,056	44.3	15.2	20.0	3.0	17.2	0.3
April	132,138	43.6	13.4	22.3	2.7	17.7	0.3
May	137,745	43.3	12.7	24.0	2.1	17.6	0.3
June	145,523	42.3	13.3	25.5	2.6	15.9	0.4
July	157,846	42.1	14.1	25.7	2.9	14.9	0.3
August	162,822	42.8	13.7	25.7	3.5	13.9	0.4
September	147,358	43.4	14.7	25.5	3.2	12.9	0.3
October	143,742	44.3	14.1	25.2	3.2	13.0	0.2
November	143,867	45.7	18.3	17.2	3.7	14.8	0.3
December	154,350	45.9	19.5	14.4	3.9	16.0	0.3
1973							
January	159,320	47.2	19.3	13.1	3.9	15.8	0.7
February	143,109	47.4	18.1	14.0	4.1	16.0	0.4
March	147,754	45.6	16.2	16.2	4.5	17.2	0.3
April	139,273	46.0	14.4	17.9	4.2	17.2	0.3
May	147,021	44.2	14.6	20.2	3.8	16.8	0.4
June	R160,962	43.5	16.0	21.6	4.2	14.5	0.2
July	172,539	44.1	16.5	22.5	4.0	12.7	0.2
August	175,928	44.5	17.2	21.6	4.4	11.9	0.4
September	156,304	45.6	17.2	21.0	4.9	11.0	0.3
October	153,888	45.6	17.6	19.8	4.8	11.8	0.4
November	140,785	47.3	16.6	16.5	5.7	13.5	0.4
December	153,276	47.9	16.3	13.2	5.1	17.1	0.4
1974							
January	152,226	48.2	17.1	13.5	4.9	15.9	0.4
February	141,723	46.7	15.7	13.3	5.5	18.4	0.4
March	148,046	45.3	14.7	15.6	5.5	18.5	0.4
April	137,586	45.0	14.1	17.4	4.3	19.0	0.2
May	153,076	44.3	14.7	18.4	4.0	18.3	0.3
June	148,119	44.6	14.6	20.0	4.1	16.5	0.2
July	175,057	43.0	15.4	21.1	5.5	14.6	0.4
August	174,021	43.0	15.6	20.3	7.3	13.4	0.4
September	R151,963	43.5	16.1	19.1	7.1	14.0	0.2
October	151,602						

*Includes electricity produced from geothermal power, wood, and waste. R = Revised data.

Sources: Federal Power Commission.

Production data for latest month are from Edison Electric Institute.

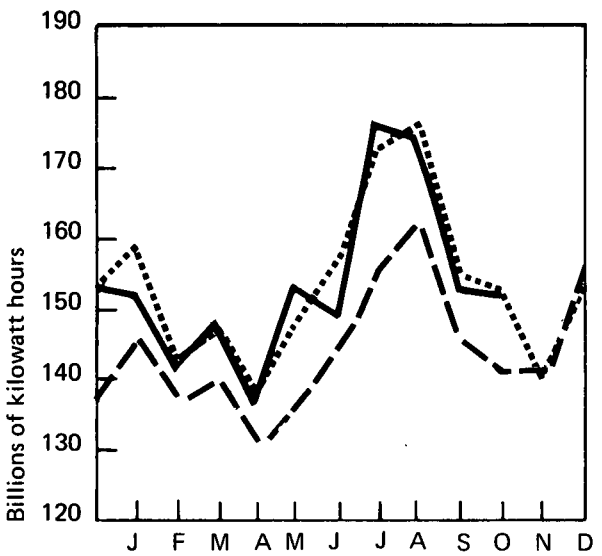
7 percent and 23 percent, respectively, whereas coal consumption was only 5 percent lower. Cumulative consumption data for 1974 indicate that there has been a slight growth in coal consumption during the year, while oil and gas consumption have decreased 7 percent and 11 percent, respectively.

Electric utility coal stocks remained about the same as in the previous year, representing on average a 90-day supply. Oil stocks, however, have been steadily growing and now represent approximately a 76-day supply, an increase of 61 percent over the same month last year.

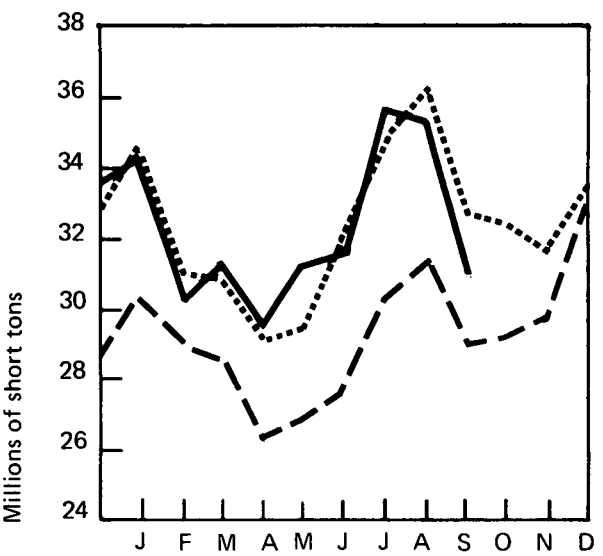
	Fuel Consumption			Stocks at End of Month	
	Coal	Oil	Gas	Coal	Oil
	In thousands of short tons	In thousands of barrels	In millions of cubic feet	In thousands of short tons	In thousands of barrels
1972					
January	30,231	46,555	251,029	76,876	46,055
February	28,946	43,325	258,859	77,138	47,111
March	28,472	38,809	294,804	80,296	52,213
April	26,093	32,325	312,229	84,984	55,730
May	26,823	32,106	351,543	91,778	57,399
June	27,749	35,098	394,585	96,553	58,815
July	30,214	40,646	433,533	93,760	60,786
August	31,651	41,073	448,594	96,611	66,024
September	28,988	38,723	398,799	98,396	66,004
October	29,133	42,876	337,567	102,205	65,531
November	29,926	47,914	262,447	102,477	62,067
December	32,817	54,479	234,683	98,671	57,686
1973					
January	34,591	55,773	219,270	95,017	53,691
February	30,921	46,978	212,983	92,993	50,858
March	30,746	42,701	255,314	93,986	54,885
April	29,209	35,845	267,151	94,991	62,411
May	29,683	38,097	316,989	98,722	64,259
June	31,953	46,669	363,239	97,995	65,003
July	34,833	50,956	414,408	92,215	67,987
August	36,065	55,166	482,053	91,356	73,259
September	32,723	47,937	418,776	90,156	74,863
October	32,398	48,033	327,010	91,428	76,343
November	31,856	45,158	247,038	90,369	81,224
December	33,704	44,696	217,049	86,880	88,228
1974					
January	34,468	46,700	222,080	83,366	89,053
February	30,062	41,186	185,468	80,962	92,645
March	31,135	40,007	244,288	84,257	94,187
April	29,452	38,124	238,272	90,901	100,210
May	31,341	41,046	304,166	93,628	103,606
June	31,892	41,084	341,067	95,811	104,316
July	35,809	48,909	399,259	91,616	105,919
August	35,365	49,084	380,979	89,691	110,997
September	30,965	44,791	320,978	92,704	113,570

Source: Federal Power Commission.

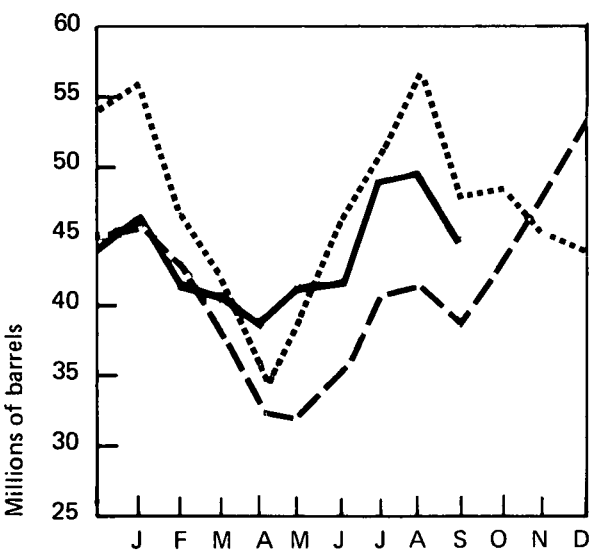
Production



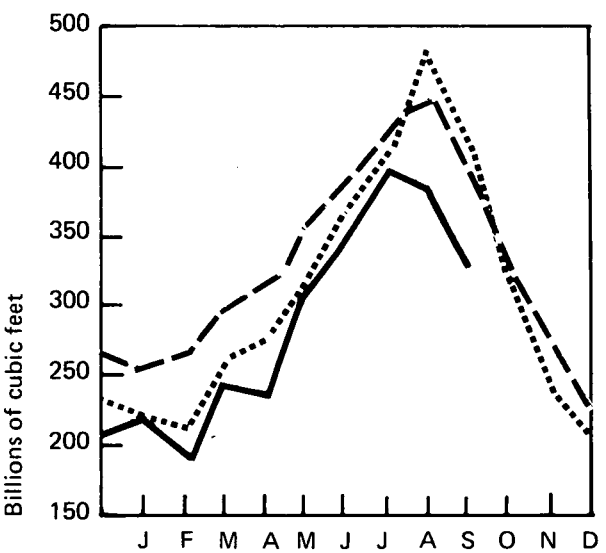
Coal Consumption



Oil Consumption

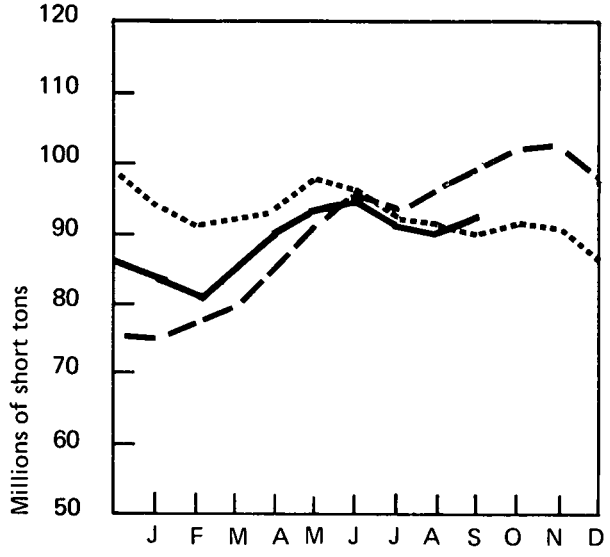


Gas Consumption

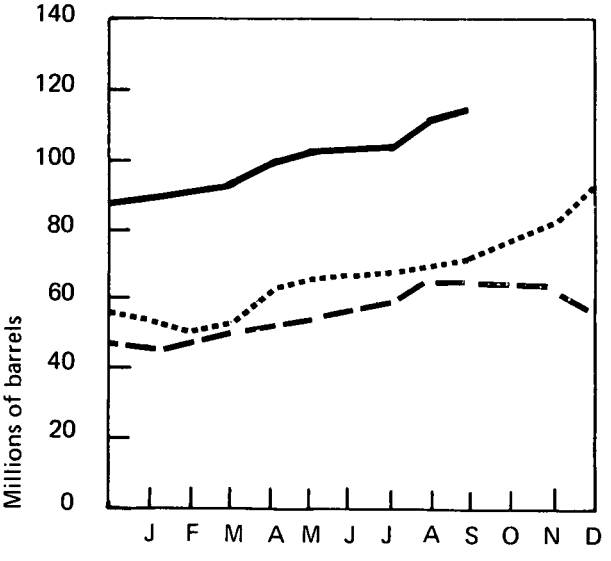


— — 1972
····· 1973
——— 1974

Coal Stocks



Oil Stocks



1972
1973
1974

Part 4 Resource Development

Oil and Gas Exploration

During October, an average of 1,584 rotary rigs were actively engaged in drilling for oil and gas. This is an increase of 57 over the September count and represents the highest level of drilling activity in more than a decade. States posting the greatest increases were Oklahoma, with a net gain of 18 rigs over the September level, and Texas, with an increase of 13, 11 of which were in the Northeast coastal area of the State (Railroad Commission District 3). Significant oil and gas field development and wildcatting are underway in this area in response to attractive prices for new crude oil and escalating intrastate gas prices. Cumulative oil production from this district is currently running 2 percent above that for 1973, in contrast to a nationwide decrease in production of about 4 percent.

Both oil and gas well completions during October declined from levels experienced for the previous month. However, an increase of 150 in the number of dry holes together with a decrease of 69 oil wells and 49 gas wells, netted a gain of 32 wells drilled for the month. The time period represented by statistics for October, it should be noted, differs from the September period in that September data comprise a 5-week reporting period while October data represent only a 4-week period. Nonetheless, total footage of wells drilled increased over 1.4 million feet during October.

	Rotary Rigs in Operation	Wells Drilled				Total Footage of Wells Drilled
	Monthly average	Oil	Gas	Dry	Total	
1972						
January	1,147	807	281	851	1,939	9,441,238
February	1,071	965	350	955	2,270	12,381,669
March	1,034	1,210	394	889	2,493	12,406,433
April	1,002	923	355	788	2,066	9,902,253
May	1,005	920	332	816	2,068	10,218,488
June	1,049	1,042	395	903	2,340	11,009,513
July	1,104	833	335	795	1,963	9,212,931
August	1,130	946	410	924	2,280	11,334,867
September	1,152	1,065	468	1,009	2,542	11,634,026
October	1,165	792	539	919	2,250	10,944,312
November	1,186	860	535	975	2,370	12,360,912
December	1,241	985	536	1,290	2,811	14,190,138
1973						
January	1,219	758	406	899	2,063	10,972,665
February	1,126	777	487	765	2,029	10,655,936
March	1,049	953	504	909	2,366	12,317,756
April	993	699	489	777	1,965	10,433,987
May	1,046	749	407	647	1,803	9,622,110
June	1,118	767	432	795	1,994	10,814,600
July	1,155	912	504	840	2,256	10,995,939
August	1,222	724	456	739	1,919	9,632,819
September	1,266	854	690	940	2,484	12,075,280
October	1,334	790	554	958	2,302	11,693,672
November	1,390	822	606	865	2,293	11,823,350
December	1,405	1,087	827	1,208	3,122	15,529,582
1974						
January	1,372	763	577	803	2,143	10,391,797
February	1,355	901	600	816	2,317	12,160,308
March	1,367	936	638	1,003	2,577	12,844,135
April	1,381	947	700	945	2,592	13,349,007
May	1,412	957	520	870	2,347	11,459,595
June	1,432	1,238	586	982	2,806	12,976,388
July	1,480	1,008	461	884	2,353	11,801,777
August	1,518	1,210	555	968	2,733	12,409,855
September	1,527	1,200	600	1,091	2,891	12,676,090
October	1,584	1,131	551	1,241	2,923	14,080,534

Sources: Rotary Rigs - Hughes Tool Company.
Wells - American Petroleum Institute.

A report released by the Independent Petroleum Association of America during October estimated that the average weighted price of 19 material items included in the cost of drilling and equipping wells had increased 27.6 percent during 1974 from the 1973 average. Included in the cost determinations were such items as road and site preparation, transportation and fuel costs, and drilling hardware (drill bits, tubing, casing, etc.). Together these 19 purchased items account for about 64 percent of total drilling costs. The remaining cost is made up of payments to drilling contractors. Taken separately, fuel prices, weighted at 0.4 percent of total drilling costs, showed the greatest increase, up 48.9 percent from the average price in 1973. Prices for oil country goods (casing, tubing, and casing hardware) were up 40.4 percent from the 1973 average. These items accounted for 18 percent of total drilling costs.

As a result of such price increases, the oil industry anticipates a 49-percent increase in capital expenditures related to production in 1975 over 1974, according to a survey conducted by the McGraw-Hill Department of Economics. The industry projects expenditures of $15.8 billion in the producing sector out of a total expense budget of $29 billion. This is an indication that the Nation can expect the prevailing high level of drilling activity to continue throughout 1975.

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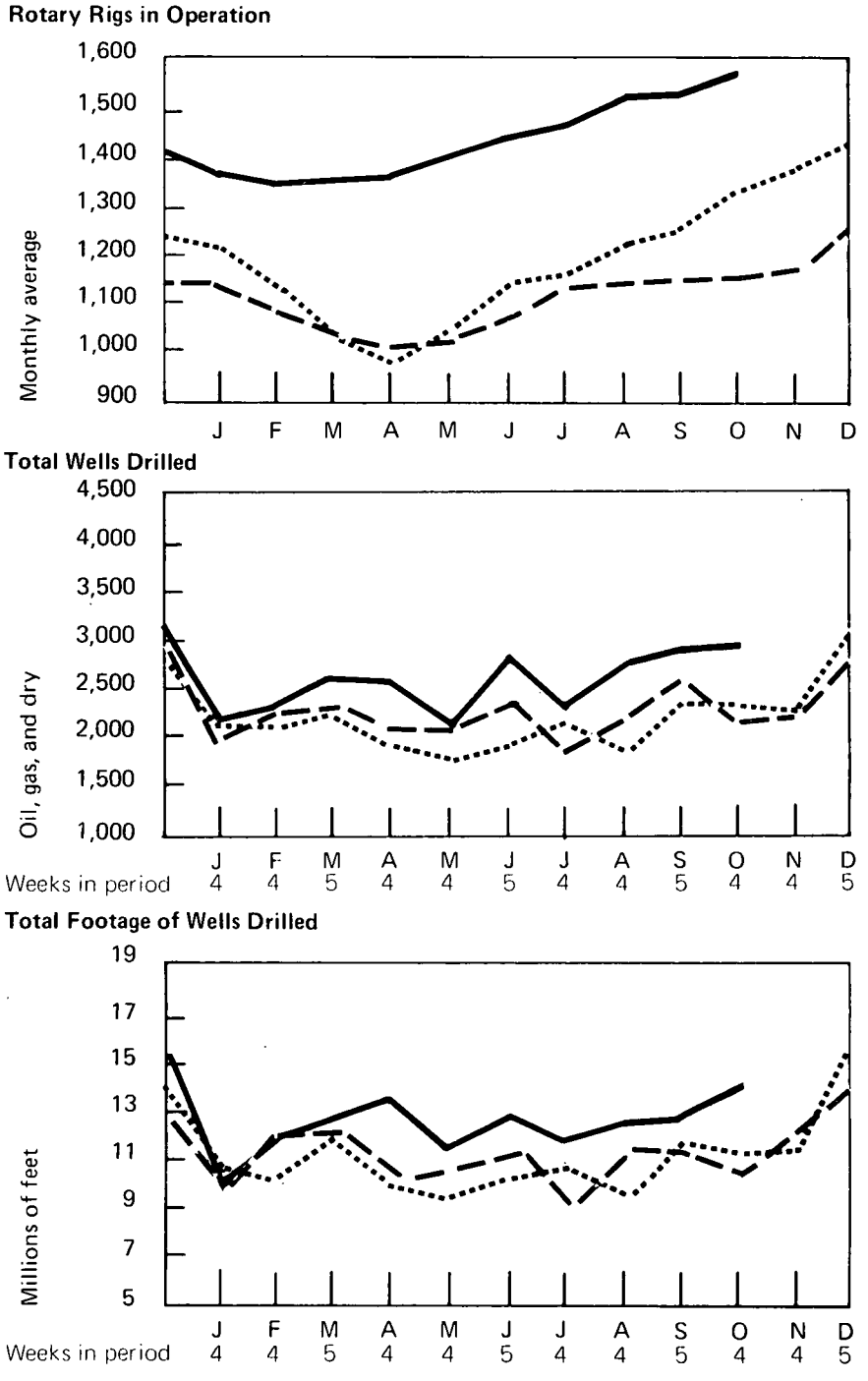
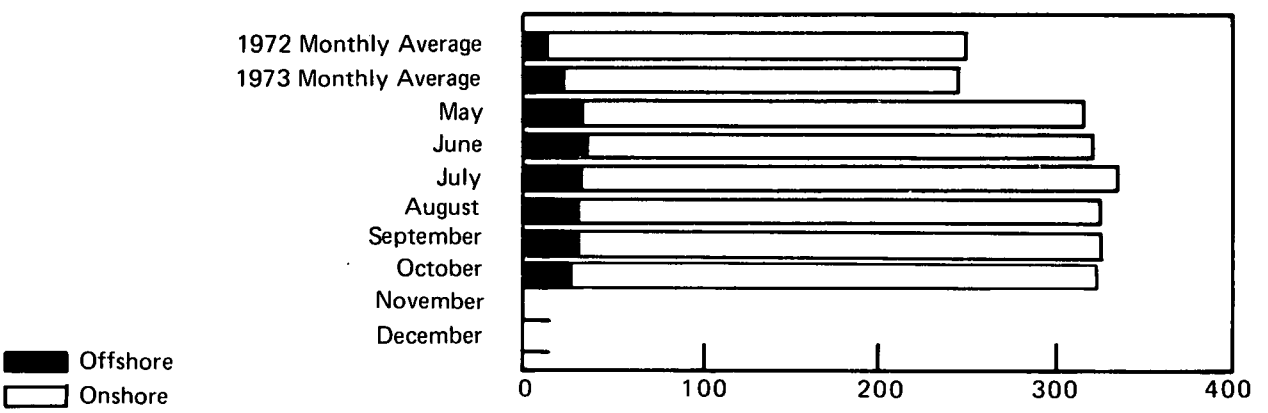


Oil and Gas Exploration *(Continued)*

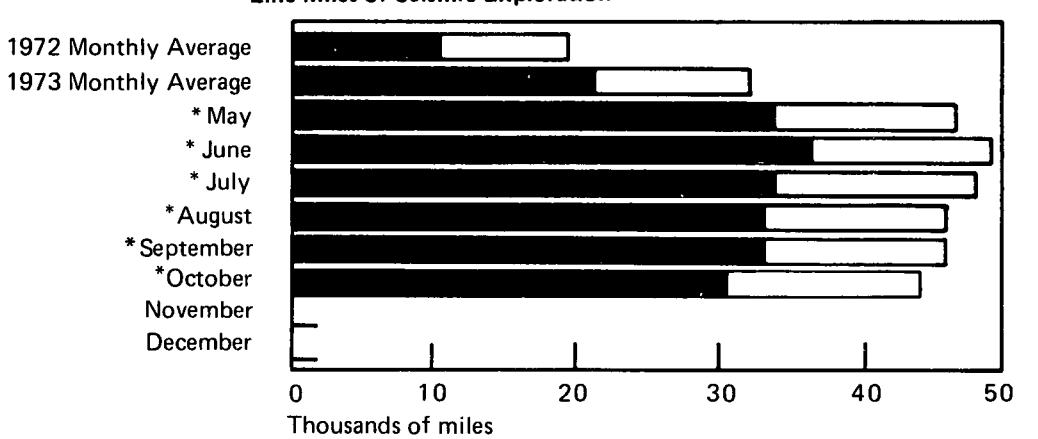
The seismic crew count at 320 was down slightly from the September 1974 level but remained well ahead of the average of 250 crews working each month during 1973. Crews engaged in offshore seismic exploration for oil and gas during October numbered 32, 2 less than during the previous month, while 1 additional crew was activated for onshore work.

	Crews Engaged in Seismic Exploration			Line Miles of Seismic Exploration		
	Offshore	Onshore	Total	Offshore	Onshore	Total
1972 Monthly Average	12	239	251	10,306	9,333	19,639
1973 Monthly Average	23	227	250	21,579	10,597	32,175
1974					Estimates *	
May	35	278	313	33,320	13,066	46,386
June	38	279	317	36,176	13,113	49,289
July	35	299	334	33,320	14,053	47,373
August	34	287	321	32,368	13,489	45,857
September	34	287	321	32,368	13,489	45,857
October	32	288	320	30,464	13,586	44,000

Crews Engaged in Seismic Exploration



Line Miles of Seismic Exploration



*See Explanatory Note 5. Source: Society of Exploration Geophysicists.

Part 5 Price

Motor Gasoline

A survey of retail dealers during October indicated that the monthly average price of regular gasoline declined from the September level by 1.8 cents per gallon, the most significant decrease since selling prices started falling in August. The average price that retailers pay for this product also dropped substantially, but not enough to keep the average dealer margin from continuing its downward trend. Since reaching its high in March, the dealer margin has declined 1.8 cents per gallon. Retailers of independent brand gasoline continued to lower their selling prices by larger amounts than major brand retailers. During October the price of regular gasoline sold by the independent retailers averaged 3.1 cents per gallon lower than the major brand price. On a regional basis, Region 2 had the highest selling price for the second consecutive month. However, all the regions showed reductions in their average selling prices from the prior month.

A survey during October of 21 major oil companies indicated that 16 companies lowered their prices, 4 did not change prices, and only 1 company increased prices.

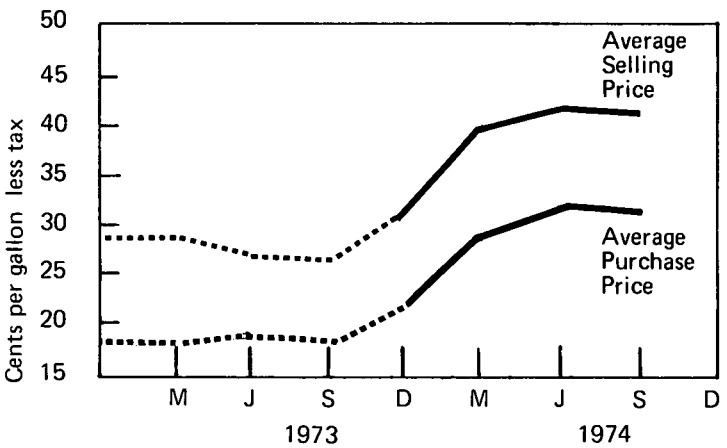
An October survey of dealer tankwagon (DTW) and jobber buying prices of gasoline sold by major companies to branded retail outlets indicated a continued softening

Regular Gasoline at Retail Outlets

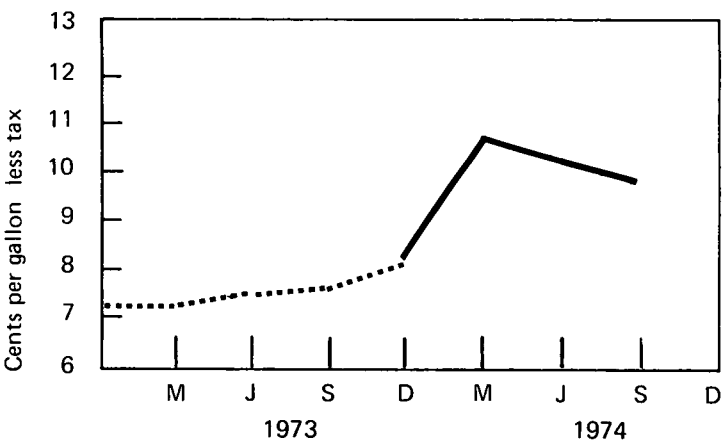
	Average Selling Price	Average Purchase Price	Average Dealer Margin
	Cents per gallon, less tax		
1973			
January	25.31	18.46	6.85
February	24.81	18.09	6.72
March	25.94	18.75	7.19
April	26.32	19.02	7.30
May	26.49	19.21	7.28
June	26.78	19.22	7.56
July	26.82	19.22	7.60
August	26.81	19.21	7.60
September	26.74	19.13	7.61
October	27.7	20.2	7.4
November	29.3	21.6	7.7
December	31.3	23.1	8.2
1974			
January	34.1	25.2	8.9
February	36.6	27.5	9.1
March	40.1	29.2	10.8
April	41.2	30.5	10.7
May	42.5	31.9	10.5
June	42.9	32.6	10.3
July	43.0	32.8	10.2
August	42.7	32.9	9.7
September	42.0	32.6	9.4
October	40.2	31.2	9.0

Sources: Platts Oilgram through September 1973.
FEA from October 1973 forward.

Average Retail Prices For Regular



Average Margins For Regular



1973
1974

of prices at the wholesale level. The jobber purchase price and the jobber selling price declined by 1.4 and 1.5 cents per gallon, respectively.

Product at Retail Outlets	Average Selling Price		Average Margins	
	October 1974	September 1974	October 1974	September 1974
	Cents per gallon, less tax			
Regular Gasoline:				
Major	40.8	42.6	9.5	9.8
Independent	37.7	39.3	7.0	7.3
National Average	40.2	42.0	9.0	9.4
Premium Gasoline:				
Major	45.0	46.6	10.5	10.7
Independent	41.4	42.7	8.5	8.5
National Average	44.4	46.0	10.2	10.3
No Lead Gasoline:				
Major	42.5	44.3	9.8	10.2
Independent	39.4	40.6	7.8	7.9
National Average	41.9	43.6	9.4	9.8
Diesel Fuel:				
Major	38.4	38.3	8.5	8.2
Independent	34.5	35.4	5.3	5.7
National Average	37.1	37.4	7.5	7.4

Regular Gasoline at Retail Outlets	Average Selling Price	Average Margin
	October 25, 1974	October 25, 1974
Regions	Cents per gallon, less tax	
1 Boston New York	40.9	8.6
2 Washington Baltimore Philadelphia	41.5	9.6
3 Buffalo Cleveland Pittsburgh	40.7	8.5
4 Atlanta Cincinnati	41.0	9.0
5 Detroit Chicao	40.5	8.6
6 Milwaukee Minneapolis	40.2	8.9
7 Dallas Houston	39.3	9.5
8 Kansas City St. Louis	40.1	9.2
9 San Francisco Seattle	40.0	10.2
10 Los Angeles San Diego	38.6	8.5
National Average	40.2	9.0

Motor Gasoline *(Continued)*

Retail Gasoline Price Changes During October 1974

Company	Effective Date	Amount of Change Cents per gallon
Amerada Hess		None
American Petrofina	October 9	-2.0
Ashland	October 14	-1.0
Atlantic Richfield	October 5	-2.0
B.P.	October 7	-1.0
Cities Service	October 16	-1.0
Champlin	October 5	1.0
Continental	October 7	-1.0
Exxon	October 12, 26	-1.0,-1.0
Getty	October 12	-2.0
Gulf	October 12	-2.0
Kerr–McGee		None
Mobil	October 3	-2.0
Phillips	October 18	-2.0
Shell	October 5	-2.0
Standard Oil of California	October 2	-0.8
Standard Oil of Indiana	October 3	-3.0
Standard Oil of Ohio	October 7	-1.0
Sun		None
Texaco	October 18	-1.0
Union Oil of California		None

Major Brand Regular Gasoline, October 1974

Marketing Region	Retail DTW Price	Change from Previous Month	Branded Jobber Price	Change from Previous Month	Regional Jobber Margin	Change from Previous Month
			Cents per gallon			
Northeast	32.00	-1.78	27.97	-1.36	4.03	-0.42
Mid Atlantic	31.08	-1.41	27.20	-1.68	3.88	0.27
Southeast	30.32	-1.31	26.63	-1.38	3.69	0.07
Central	31.58	-1.31	27.51	-1.33	4.07	0.02
Western	30.69	-1.68	26.96	-1.69	3.73	0.01
Southwest	29.55	-1.43	26.15	-1.22	3.40	0.21
Pacific	30.20	-1.25	26.57	-1.25	3.63	0
Average	30.77	-1.46	27.00	-1.41	3.77	-0.05

Heating Oil

The average price of heating oil sold to residential customers increased during September by 0.5 cent per gallon to 36.3 cents per gallon. On a regional basis, New England had the highest price at 37.2 cents per gallon. The average institutional and utility selling price also increased, but by a smaller amount of 0.3 cent per gallon. The price for industrial use, however, declined by 2.2 cents to 30.9 cents per gallon. The average purchase price for heating oil jobbers increased during September by 0.6 cent to 28.7 cents per gallon, reflecting a passthrough by refiners of previously unrecovered costs.

The October survey of 21 major oil companies indicated that heating oil prices increased somewhat during October. Seven companies increased prices, 12 did not change prices, and 2 decreased prices. In comparison, during September, only 3 companies increased prices, 3 decreased prices, and 15 left prices unchanged.

Average Prices for September 1974

	Average Purchase Price	Residential		Institutional and Utility		Industrial	
		Selling Price	Margin	Selling Price	Margin	Selling Price	Margin
		Cents per gallon					
New England	29.2	37.2	8.0	35.4	6.2	31.5	2.3
Mid Atlantic	28.9	36.5	7.6	34.5	5.6	30.7	1.8
Southeast	28.5	36.1	7.6	34.2	5.7	31.6	3.1
East North-Central	27.8	35.0	7.2	33.1	5.3	29.5	1.7
West North-Central	28.4	35.8	7.4	33.9	5.5	29.5	1.1
East South-Central	28.2	33.6	5.4	32.6	4.0	31.5	3.3
Mountain	29.3	32.3	3.0	34.8	5.5	31.7	2.4
West Coast	28.8	35.1	6.3	34.5	5.7	32.2	3.4
National Average	28.7	36.3	7.6	34.5	5.8	30.9	2.2

Price Changes During October 1974

Company	Effective Date	Amount of Change
		Cents per gallon
Amerda Hess	October 29	1.0
American Petrofina		None
Ashland		None
Atlantic Richfield	October 30	1.0
B.P.		None
Cities Service		None
Champlin	October 5	2.0
Continental		None
Exxon	October 26	1.5
Getty	October 31	1.0
Gulf		None
Kerr–McGee	October 23	2.5
Mobil		None
Phillips		None
Shell		None
Standard Oil of California	October 2	-0.7
Standard Oil of Indiana	October 3	-3.0
Standard Oil of Ohio		None
Sun		None
Texaco	October 29	1.0
Union Oil of California		None

Crude Oil

Final August reports indicated that the average free market price of domestic crude petroleum during that month was $9.98 per barrel, up 3 cents per barrel from its July level. A survey during October of major producers indicated that the number of geographical areas with new oil price postings above their August levels increased during October. Most of these increases were effective retroactively to September 1. Preliminary estimates of the September and October average new oil prices, taking into account these higher postings, are $10.03 per barrel for both months.

Relative to total crude production, new oil and resulting released oil production declined during August from their July levels. The percentages of production accounted for by new oil and released oil during August were 14 and 8 percent, respectively. The estimated total percentage of oil being sold at the free market price, including 12 percent contributed by stripper well production, was 34 percent.

A preliminary estimate of the average cost for domestic crude petroleum delivered to refiners during September was $7.16 per barrel, down slightly from the revised August figure of $7.20 per barrel.

A preliminary estimate of the refiner acquisition cost of imported crude petroleum during September was $12.52

Percentage of Domestic Production Sold at Controlled and Uncontrolled Prices

	Controlled	Uncontrolled		
	Old Oil	New Oil	Released	Stripper
1974				
January	60	17	10	13
February	62	15	10	13
March	60	16	11	13
April	60	16	11	13
May	62	15	10	13
June	63	15	9	13
July	64	15	9	12
August	66	14	8	12

Domestic Crude Petroleum Prices at the Wellhead

	Old	New
	Dollars per barrel	
1974		
January	5.25	9.82
February	5.25	9.87
March	5.25	9.88
April	5.25	9.88
May	5.25	9.88
June	5.25	9.95
July	5.25	9.95
August	5.25	R 9.98
September	5.25	R*10.03
October	5.25	*10.03

*Preliminary estimate.
R = Revised data.

per barrel, a decline of 16 cents per barrel from the revised August figure of $12.68 per barrel. The September amount was 54 cents per barrel less than the June high of $13.06 per barrel.

Landed costs of crude petroleum still vary considerably by country of origin. Of the eight largest sources of imported crude petroleum, the lowest cost crude came from Venezuela at $11.20 per barrel and the highest came from Indonesia at $14.38 per barrel. Part of the variability in costs can be attributed to quality differences. Imports from Indonesia, Venezuela, Algeria, Saudia Arabia, and the United Arab Emirates showed cost increases, while imports from Canada, Nigeria, and Iran decreased in cost. The cost of crude from Nigeria, a significant source of imported crude, has declined by $1.13 per barrel since its high in May.

Preliminary data indicate that the composite cost of crude petroleum purchased by refiners, which includes both imported and domestic crude costs, was $9.14 per barrel during September, down 3 cents per barrel from its revised August level and down 31 cents per barrel from its high in June. Composite costs represent the amount of crude cost which refiners may pass on to their customers.

Refiner Acquisition Cost of Crude Petroleum*

	Domestic	Imported	Composite
		Dollars per barrel	
1974			
January	6.72	9.59	7.46
February	7.08	12.45	8.57
March	7.05	12.73	8.68
April	7.21	12.72	9.13
May	7.26	13.02	9.44
June	7.20	13.06	9.45
July	7.19	12.75	9.30
August	R7.20	R12.68	R9.17
September	**7.16	**12.52	**9.14

**Preliminary data.
R = Revised data.

Estimated Landed Cost of Imported Crude Petroleum From Selected Countries*

	Algeria	Canada	Indonesia	Iran	Nigeria	Saudi Arabia	U. A. Emirates	Venezuela
				Dollars per barrel				
1973								
December	NA	6.32	6.42	6.37	8.54	5.49	NA	6.70
1974								
January	NA	6.70	NA	8.53	12.13	NA	NA	10.28
Febraury	NA	10.90	NA	12.11	12.74	NA	NA	11.31
March	NA	11.14	12.13	13.02	13.26	NA	NA	11.78
April	13.63	11.02	12.49	12.83	13.67	11.59	NA	11.38
May	14.67	11.47	12.95	13.84	13.83	11.53	NA	11.28
June	14.43	12.56	13.21	13.44	13.03	11.32	13.06	10.39
July	13.65	12.65	13.77	13.02	12.75	11.97	12.34	10.64
August	13.96	12.49	14.38	12.32	12.70	12.16	12.69	11.20

NA = Not available.

*See Explanatory Note 6 .

Utility Fossil Fuels

Nationally, the average cost of fossil fuels delivered to utilities during July 1974 was 92.2 cents per million Btu, an increase of 4.5 cents over the June figure and an increase of 17.8 cents over the January 1974 figure.

Regionally, the average costs of fossil fuels delivered to utilities during July continued their upward trends with one exception, the West North Central region, which had a fuel cost decrease of 1.9 cents per million Btu from its June level. The most notable increase occurred in the West South Central region where the average fossil fuel cost rose from 50.0 cents per million Btu to 59.4 cents per million Btu.

On an individual fuel basis, the national average price of coal rose moderately by 3.4 cents per million Btu. The most significant monthly coal price increases were in the New England (10.9 cents) and South Atlantic (10.2 cents) regions. Several regions registered minor reductions in coal prices during July. The East South Central regional price decreased by 0.2 cent per million Btu and the Mountain regional price decreased by 0.7 cent per million Btu.

Residual fuel oil prices, on the other hand, reflected continuing stable market conditions. The national average price of residual fuel declined slightly by 0.7 cent per million Btu. The region experiencing the largest gain in

Cost of Fossil Fuels Delivered to Steam-Electric Utility Plants

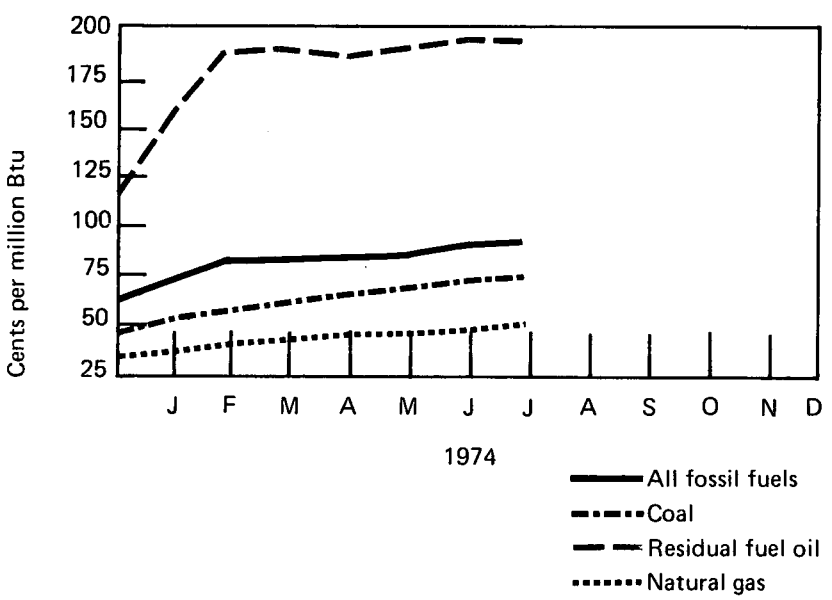
All Fossil Fuels*

Cents per million Btu

Region	1974 JAN	FEB	MAR	APR	MAY	JUN	JUL
New England	147.7	175.7	192.7	186.8	180.0	184.7	186.2
Middle Atlantic	111.6	129.0	123.9	124.9	124.2	137.6	144.7
East North Central	52.5	57.0	62.3	63.7	68.9	76.9	79.1
West North Central	47.9	40.5	36.5	42.4	43.9	47.2	45.3
South Atlantic	88.5	100.6	102.8	105.9	109.8	119.0	123.7
East South Central	46.0	52.4	54.1	54.4	58.3	62.5	65.7
West South Central	48.9	46.2	48.0	44.1	47.3	50.0	59.4
Mountain	43.7	48.1	42.7	43.1	36.3	40.3	45.0
Pacific	119.7	160.3	114.1	117.8	122.4	117.9	118.9
National Average	74.4	81.6	80.9	81.1	81.2	87.7	92.2

*See Explanatory Note 7.

National Average



residual prices was the West South Central region, whose price advanced by 26.4 cents per million Btu. The most significant price declines were in the West North Central region and in the Mountain region at 26.6 and 23.0 cents per million Btu, respectively.

Natural gas prices continued their gradual upward trend with an increase in the national average of 1.9 cents per million Btu during July. No regions encountered price declines. Four regions had noteworthy price advances. In order of magnitude they were as follows:

New England region (14.0 cents per million Btu)
East South Central region (10.5 cents per million Btu)
Pacific region (9.3 cents per million Btu)
Middle Atlantic region (7.9 cents per million Btu)

It should be noted, however, that the areas with particularly heavy consumption of a single utility fuel, for example, East North Central for coal, South Atlantic and Middle Atlantic for residual, and West North Central and West South Central for natural gas, in general have the most stable fuel costs.

Coal

Cents per million Btu

Region 1974	JAN	FEB	MAR	APR	MAY	JUN	JUL
New England	102.8	114.2	132.0	136.8	128.8	95.9	106.8
Middle Atlantic	60.2	69.5	73.1	80.8	79.3	88.6	94.3
East North Central	48.9	52.4	57.4	59.2	65.3	71.7	73.0
West North Central	36.7	36.3	37.7	41.0	41.7	42.0	44.0
South Atlantic	66.3	76.7	81.7	85.3	88.0	90.2	100.4
East South Central	43.3	49.8	51.6	52.7	54.2	57.9	57.7
West South Central	13.6	13.6	13.6	13.6	13.6	17.7	17.7
Mountain	25.9	26.8	26.1	26.7	24.9	25.7	25.0
Pacific	35.0	NA	35.1	35.3	35.6	35.5	37.8
National Average	51.4	56.9	60.8	64.0	65.8	69.5	72.9

Residual Fuel Oil*

Cents per million Btu

Region 1974	JAN	FEB	MAR	APR	MAY	JUN	JUL
New England	156.6	190.5	208.1	199.4	193.1	201.1	199.2
Middle Atlantic	186.5	208.1	212.2	196.0	208.6	207.7	208.6
East North Central	110.3	127.1	158.3	183.6	138.7	198.2	182.7
West North Central	160.0	154.8	169.1	178.2	160.9	179.3	152.7
South Atlantic	140.6	167.3	172.7	172.8	174.9	181.5	178.7
East South Central	112.5	132.2	136.0	153.0	164.9	171.5	169.6
West Couth Central	107.5	126.8	144.6	159.4	152.1	161.1	187.5
Mountain	159.2	174.9	172.1	174.1	194.4	199.2	176.2
Pacific	155.5	191.2	161.8	180.8	188.7	202.5	204.9
National Average	158.2	185.9	188.0	186.5	188.1	194.9	194.2

Natural Gas**

Cents per million Btu

Region 1974	JAN	FEB	MAR	APR	MAY	JUN	JUL
New England	57.1	73.3	134.2	116.4	116.3	124.7	138.7
Middle Atalantic	64.2	72.7	72.4	59.5	59.3	77.3	85.2
East North Central	63.8	62.4	65.7	60.1	72.0	76.1	77.3
West North Central	35.7	38.0	39.5	41.2	41.8	41.7	42.1
South Atlantic	51.7	57.3	61.9	63.2	57.8	59.8	60.9
East South Central	45.5	48.1	47.7	50.7	50.5	52.8	63.3
West South Central	32.9	35.2	37.6	39.1	39.5	43.6	43.8
Mountain	47.9	54.5	48.4	48.3	48.8	49.2	50.8
Pacific	48.2	47.6	46.6	49.8	50.4	50.7	60.0
National Average	37.3	39.8	42.5	43.6	44.0	47.9	49.8

NA=Not available.
*See Explanatory Note 7.
**Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
Source: Federal Power Commission

Definitions

Base Production Control Level
The total number of barrels of domestic crude petroleum produced from a particular property in the corresponding month of 1972.

Ceiling Price
The maximum permissible selling price for a particular grade of domestic crude petroleum in a particular field is the May 15, 1973, posted price plus $1.35 per barrel.

Controlled Crude Oil
Domestically produced crude petroleum that is subject to the ceiling price for crude oil. For a particular property which is not a stripper-well lease, the volume of controlled oil equals the base production control level minus an amount of released oil equal to the new oil production from that property.

Crude Oil Domestic Production
The volume of crude oil flowing out of the ground. Domestic production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

Crude Oil Imports
The monthly volume of crude oil imported which is reported by receiving refineries, including crude oil entering the U.S. through pipelines from Canada.

Crude Oil Input to Refineries
Total crude oil used as input for the refining process, less crude oil lost or used for refinery fuel.

Crude Oil Stocks
Stocks held at refineries and at pipeline terminals. Does not include stocks held on leases (storage facilities adjacent to the wells), which historically total approximately 13 million barrels.

Dealer Tankwagon (DTW) Price
The price at which a retail dealer purchases gasoline from a distributor or a jobber.

Distillate Fuel Oil
The lighter fuel oils distilled off during the refining process. Included are products known as ASTM grades Nos. 1 and 2 heating oils, diesel fuels, and No. 4 fuel oil. The major uses of distillate fuel oils include heating, fuel for on and off highway diesel engines, and railroad diesel fuel. Minor quantities of distillate fuel oils produced and/or held as stocks at natural gas processing plants are not included in this series.

Domestic Non-controlled Crude Oil
That portion of domestic crude oil production including new, released, and stripper oil which may be sold at a price exceeding the ceiling price.

Electricity Production
Production at electric utilities only. Does not include industrial electricity generation.

Firm Natural Gas Service
High priority gas service in which the pipeline company is under contract to deliver a specified volume of gas to the customer on a non-interruptible basis. Residential and small commercial facilities usually fall into this category.

Interruptible Natural Gas Service
Low priority gas service in which the pipeline company has the contractual option to temporarily terminate deliveries to customers by reason of claim of firm service customers or higher priority users. Large commercial facilities, industrial users, and electric utilities usually fall into this category.

Jet Fuel
Includes both naphtha-type and kerosine-type fuels meeting standards for use in aircraft turbine engines. Although most jet fuel is used in aircraft, some is used for other purposes, such as for generating electricity in gas turbines.

Jobber
A petroleum distributor who purchases refined product from a refiner or terminal operator for the purpose of reselling to retail outlets and commercial accounts or for the purpose of retailing through his own retail outlets.

Jobber Margin
The difference between the price at which a jobber purchases refined product from a refiner or terminal operator and the price at which the jobber sells to retail outlets. This does not reflect margins obtained by jobbers through retail sales or commercial accounts.

Jobber Price
The price at which a petroleum jobber purchases refined product from a refiner or terminal operator.

Landed Cost
The cost of imported crude oil equal to actual cost of crude at point of origin plus transportation cost to the United States.

Line Miles of Seismic Exploration
The distance along the earth's surface that is covered by seismic traverses.

Motor Gasoline Production
Total production of motor gasoline by refineries, measured at refinery output. Relatively small quantities of motor gasoline are produced at natural gas processing plants, but these quantities are not included.

Motor Gasoline Stocks
Primary motor gasoline stocks held by gasoline producers. Stocks at natural gas processing plants are not included.

Natural Gas Imports
This is based on data collected by the Federal Power Commission from major interstate pipeline companies.

Natural Gas Liquids
Products obtained from natural gasoline plants, cycling plants, and fractionators after processing the natural gas. Included are ethane, liquified petroleum (LP) gases (propane, butane, and propane-butane mixtures), natural gasoline, plant condensate, and minor quantities of finished products such as gasoline, special naphthas, jet fuel, kerosine, and distillate fuel oil.

Natural Gas Marketed Production
Gross withdrawals from the ground, less gas used for repressuring and quantities vented and flared. Gas volumes are reported at a base pressure of 14.73 pounds per square inch absolute at 60°F. Data are from Bureau of Mines and are collected from reports received from the Interstate Oil Compact Commission provided by State agencies.

New Oil
The volume of domestic crude petroleum produced from a property in a specific month which exceeds the base production control level for that property.

Old Oil
Same as controlled crude oil.

Primary Stocks of Refined Products
Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

Refined Products Domestic Demand
A calculated value, computed as domestic production plus net imports (imports less exports), less the net increase in primary stocks. It, therefore, represents the total disappearance of refined products from primary supplies.

Refined Products Imports
Imports of motor gasoline, naphtha-type jet fuel, kerosine-type jet fuel, liquified petroleum gases, kerosine, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, and asphalt. Imports of bonded bunkers, jet fuel, distillate and residual fuel oils for onshore military use, and receipts from Puerto Rico, the Virgin Islands, and Guam are based on data reported to the Oil Import Administration of FEA. All other figures are compiled by Bureau of Mines from Department of Commerce data.

Released Oil
That portion of the base production control level for a property which is equal to the volume of new oil produced in that month and which may be sold above the ceiling price. The amount of released oil may not exceed the base production control level for that property.

Residual Fuel Oil
The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as ASTM grades Nos. 5 and 6 oil, heavy diesel oil, Navy Special Oil, Bunker C oil, and acid sludge and pitch used as refiner fuels. Residual fuel oil is used for the production of electric power, for heating, and for various industrial purposes.

Rotary Rig
Machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Stripper Well Lease
A property of which the average daily production of crude petroleum and petroleum condensates, including natural gas liquids, per well did not exceed 10 barrels per day during the preceding calendar month.

Well
Hole drilled for the purpose of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, strati graphic tests, or service wells. This is a standard definition of the American Petroleum Institute.

Explanatory Notes

1. Domestic production of energy includes the production of fossil fuels as well as the production of electricity by hydroelectric and nuclear powerplants. For fossil fuels, these series were derived by multiplying the physical units of the product by the approximate heat content of the fuel listed in the Units of Measure and Equivalencies. Data on hydroelectric and nuclear powerplant generation were obtained from FPC.

2. Domestic demand figures for natural gas liquids (NGL) as reported by BOM and reproduced in this volume do not include amounts utilized at refineries for blending purposes in the production of finished products, principly gasoline. Consumption of NGL at refineries for this purpose has remained at a fairly constant level since 1972 of around 700,000 - 850,000 barrels per day. NGL domestic demand statistics do incorporate, however, some liquefied gases produced at refineries (LRG) which are used for fuel and petrochemical feedstocks. The NGL production and stock series reported in this volume include only those liquids obtained from or held as stocks at natural gas processing plants and do not incorporate minor quantities of these liquids produced and/or held as stocks at refineries.

3. Bituminous coal and lignite consumption data reported by the Bureau of Mines are derived from information provided by the Federal Power Commission, Department of Commerce, and reports from selected manufacturing industries and retailers. Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is a calculated value representing total disappearance from primary supplies.

4. Bituminous coal and lignite production is calculated from the number of railroad cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are estimated by the Bureau of Mines from Association of American Railroads reports of carloadings.

5. Mileage estimates for 1974 were derived by multiplying the monthly seismic crew counts by the average number of miles traversed per crew month in 1973.

6. The refiner acquisition cost of imported crude petroleum is the average landed cost of imported crude petroleum to the refiner and represents the amount which may be passed on to the consumer. The estimated landed cost of imported crude petroleum from selected countries does not represent the total cost of all imported crude. Imported crude costs to U.S. company-owned refineries in the Caribbean are not included in the landed cost, and costs of crude petroleum from countries which export only small amounts to the U.S. are also excluded.

7. The weighted average utility fuel cost for the total United States includes distillate fuel oil consumed by utilities whereas the regional breakdown for residual fuel oil prices represents only No. 6 fuel oil prices.

Units of Measure

Weight

1 metric ton	*contains*	1.102 short tons

Conversion Factors for Crude Oil
Average Gravity

1 barrel (42 gallons)	*weighs*	0.136 metric tons (0.150 short tons)
1 metric ton	*contains*	7.33 barrels
1 short ton	*contains*	6.65 barrels

Approximate Heat Content of Various Fuels

Petroleum	
Crude Oil	5.598 million Btu/barrel
Gasoline	5.248 million Btu/barrel
Jet fuel, naphtha-type	5.355 million Btu/barrel
Jet fuel, kerosine-type	5.670 million Btu/barrel
Distillate fuel oil	5.825 million Btu/barrel
Residual fuel oil	6.287 million Btu/barrel
Natural gas liquids	3.99 million Btu/barrel
Natural gas	1,031 Btu/cubic foot
Coal	
Bituminous and lignite	24.05 million Btu/short ton
Anthracite	25.40 million Btu/short ton
Nuclear power	10,660 Btu/kilowatt hour
Hydroelectric power	10,379 Btu/kilowatt hour

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